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FIG.1

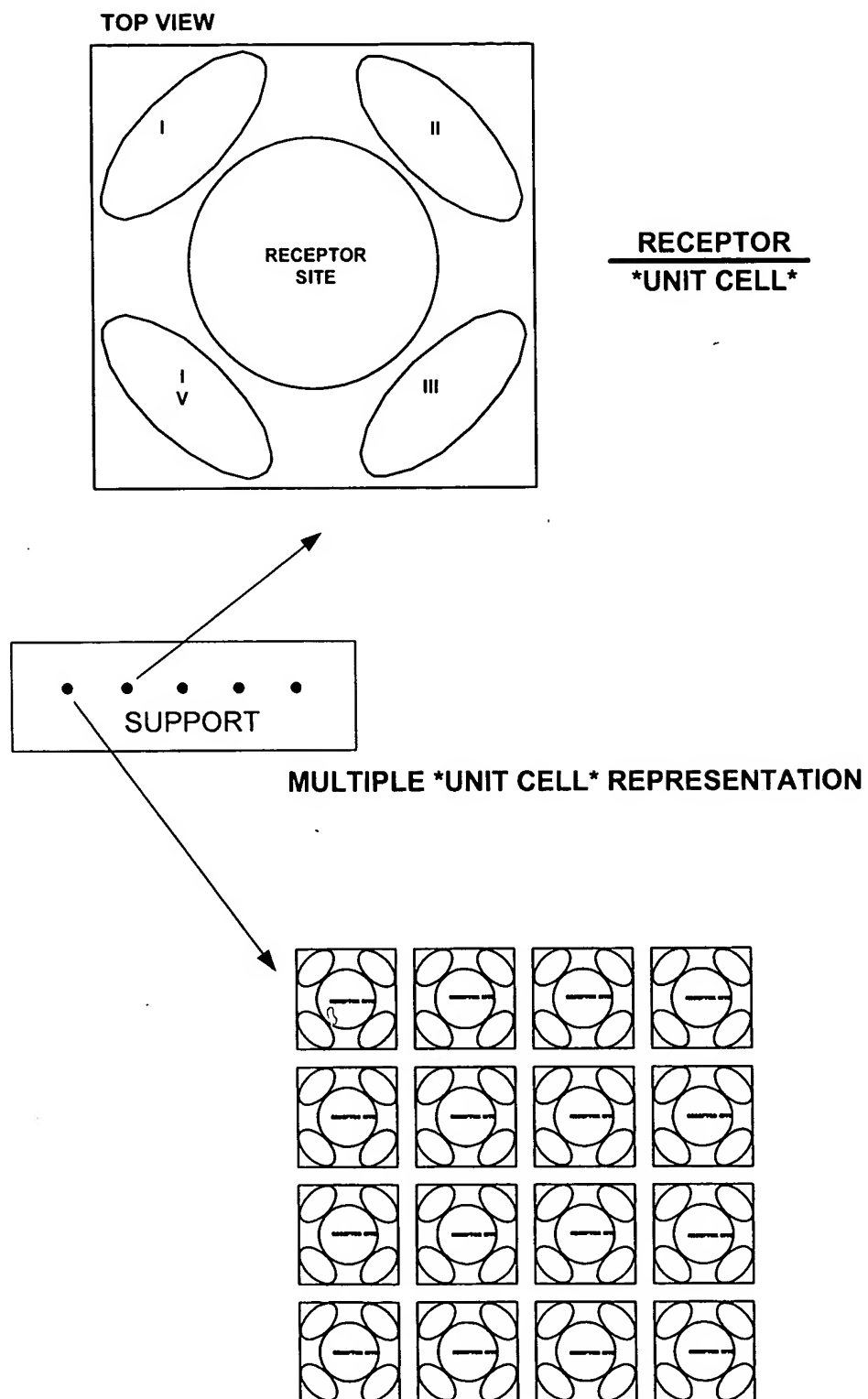
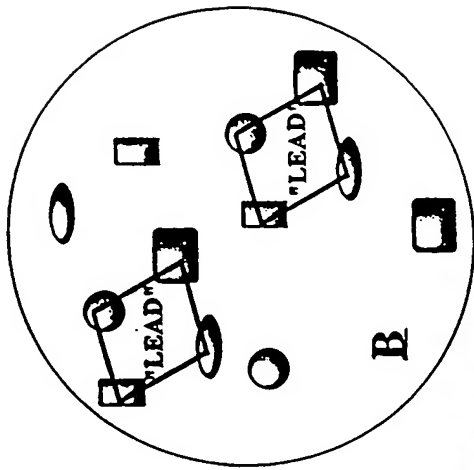
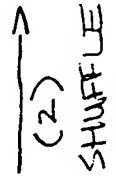
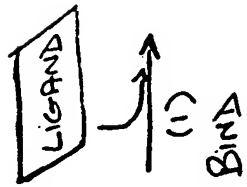
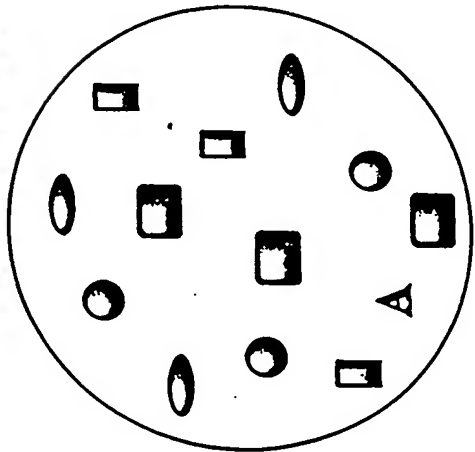


FIG 2

RANDOM DISTRIBUTION



EQUILIBRIUM BINDING DISTRIBUTION

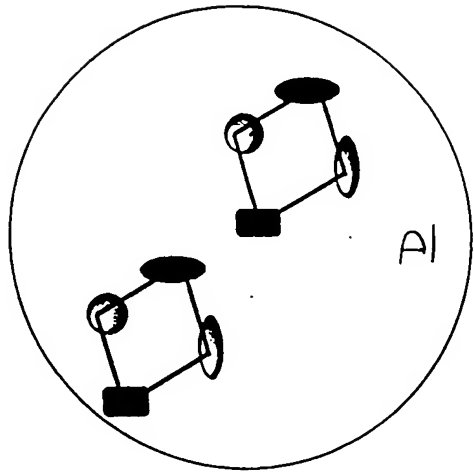
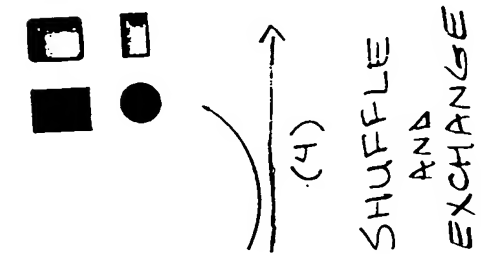
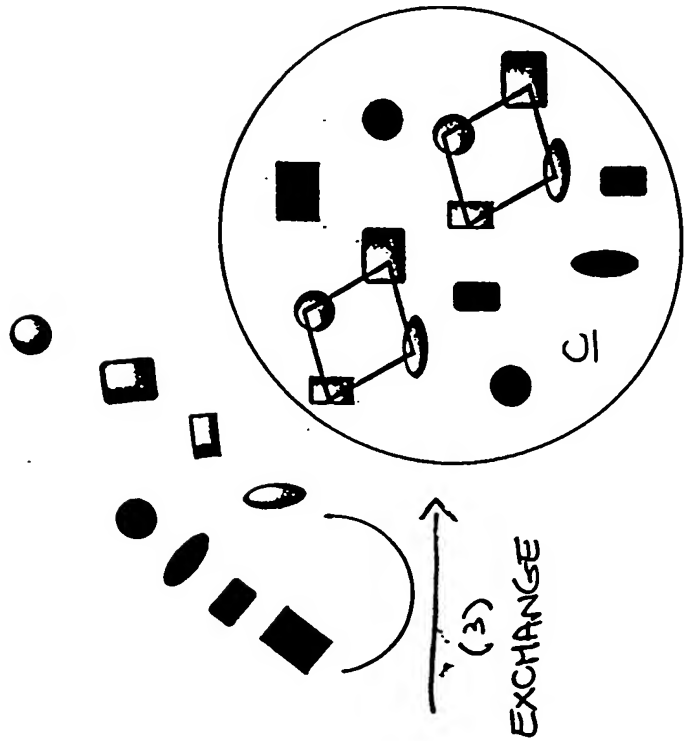


FIG.3A

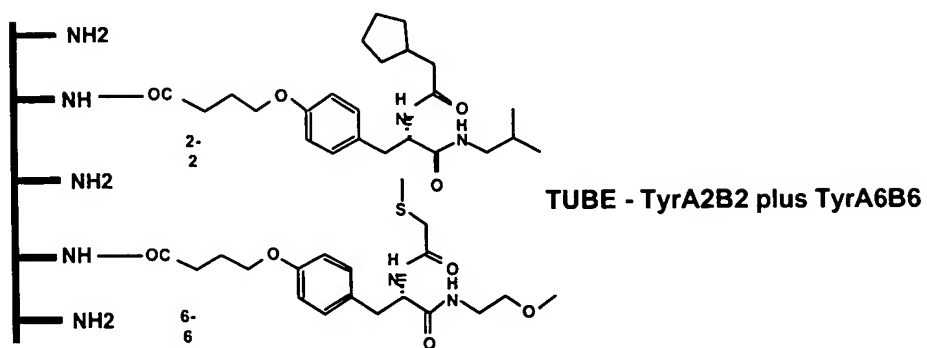
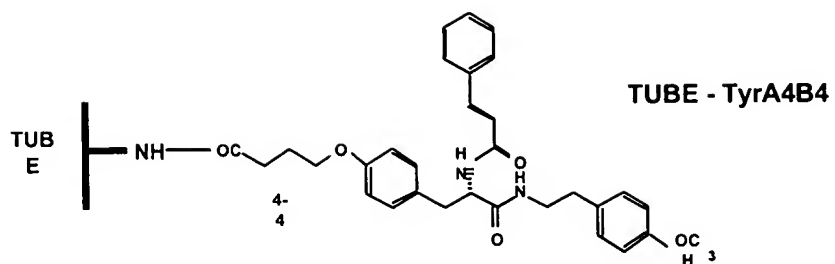
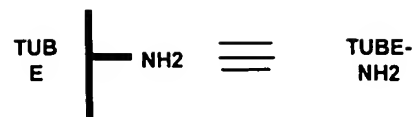


FIG.3B

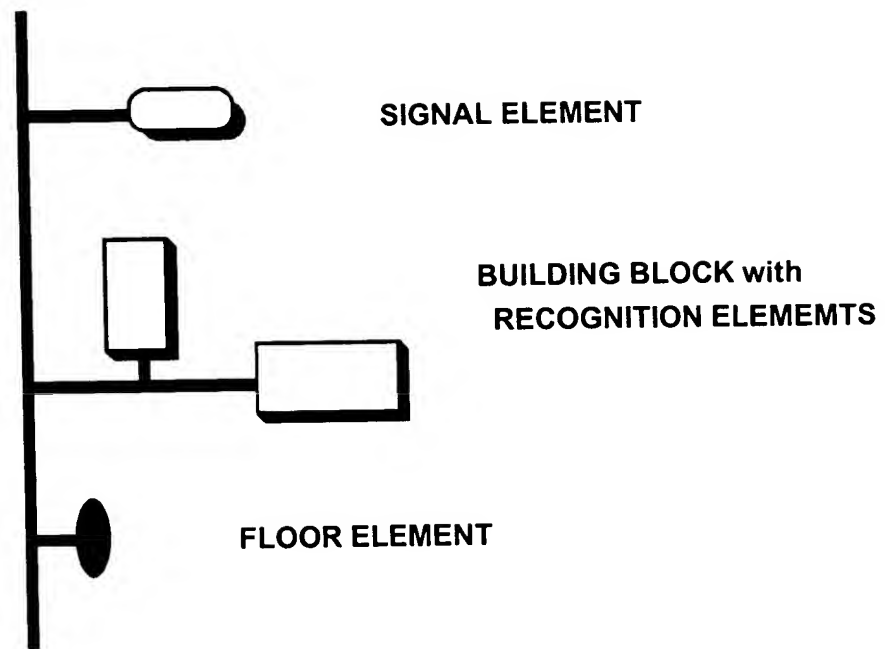


FIG.4

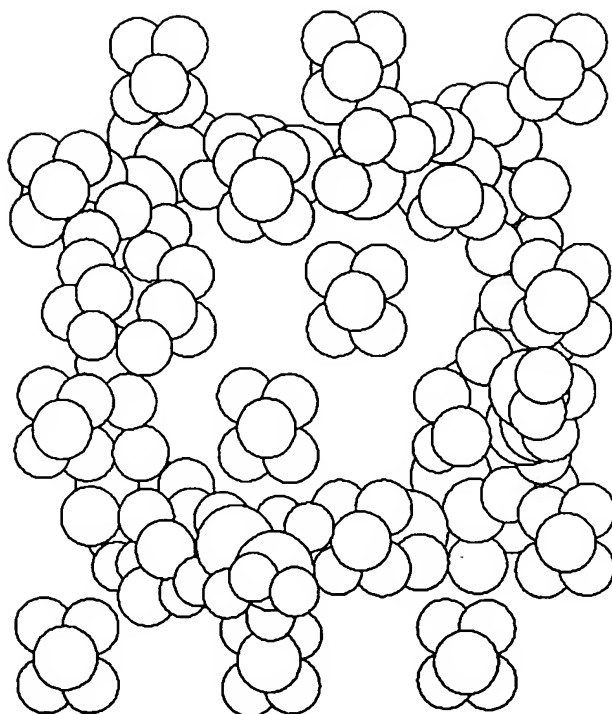
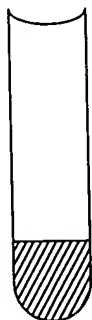
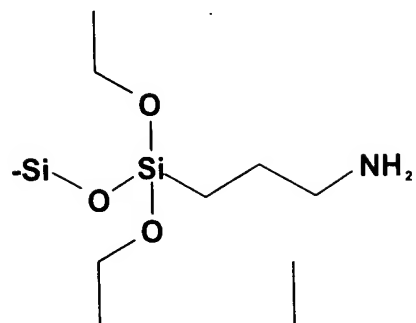


FIG.5

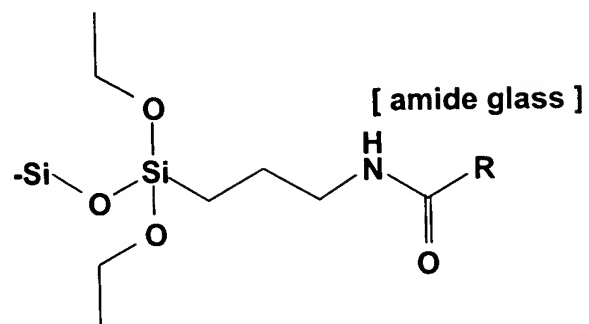
-Si-OH



[native glass]



[amine glass]



[amide glass]

FIG.6

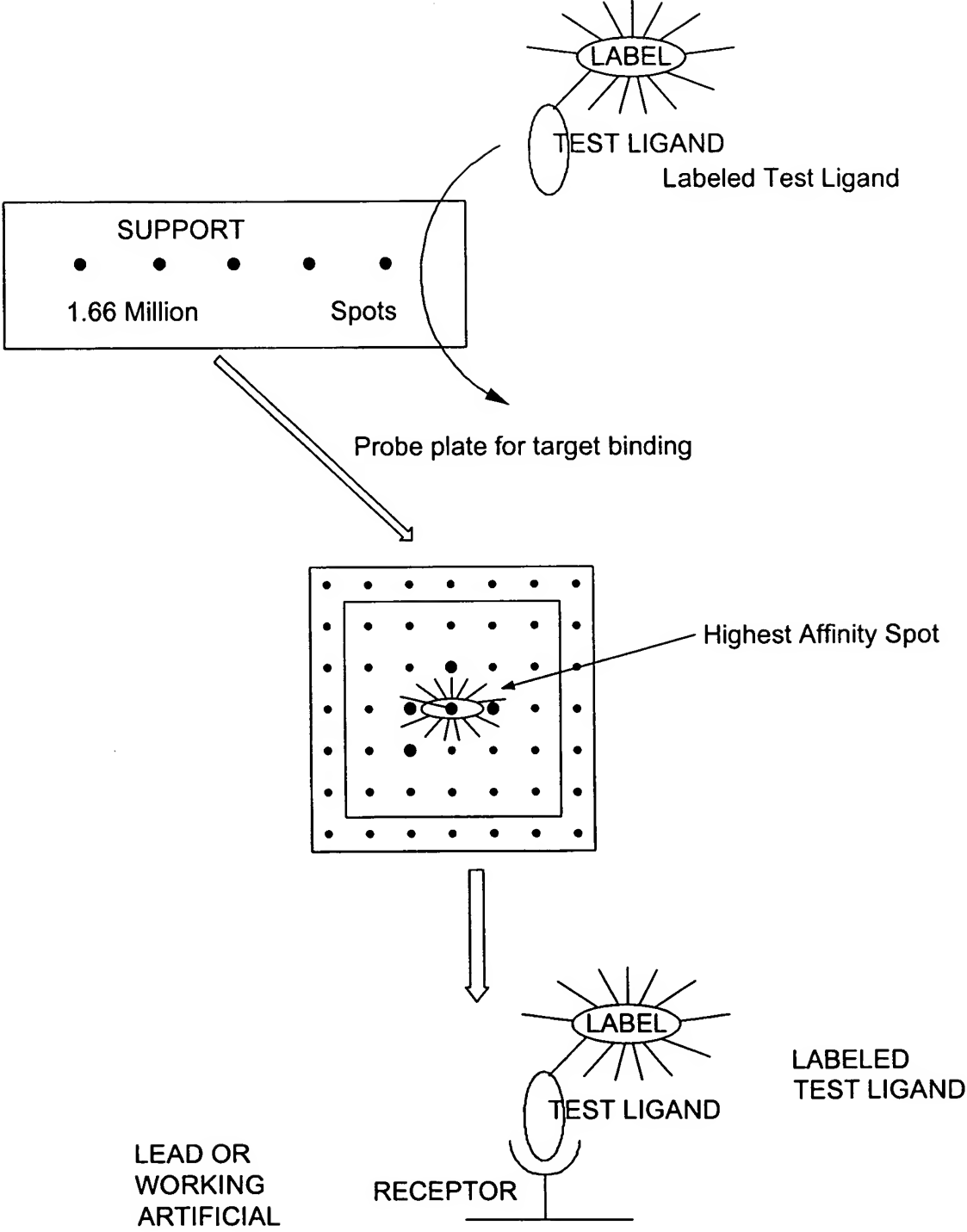
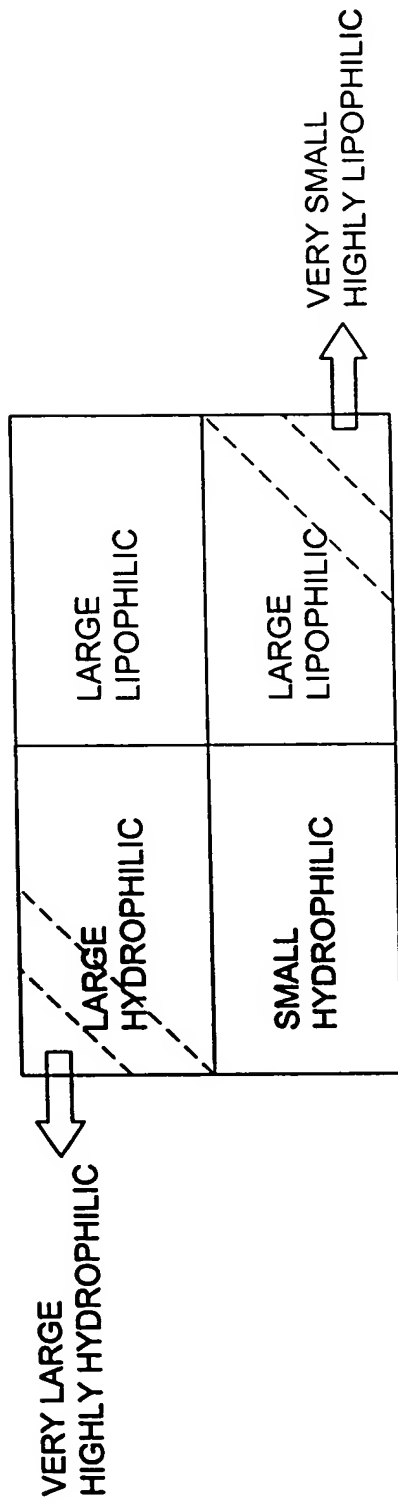


FIG. 7



BINDING SPACE

LOGP versus VOLUME

FIG. 8

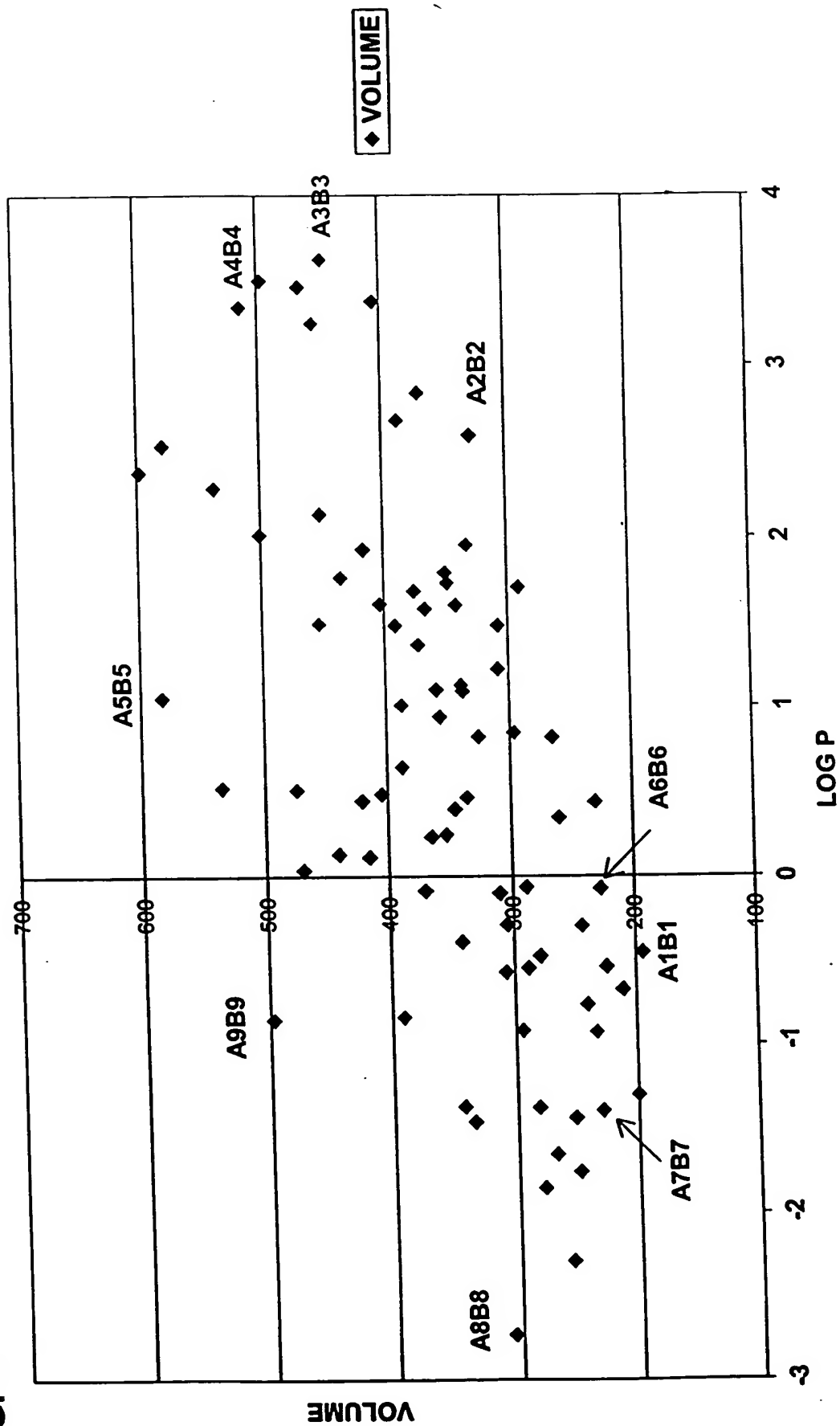


FIG 9 A

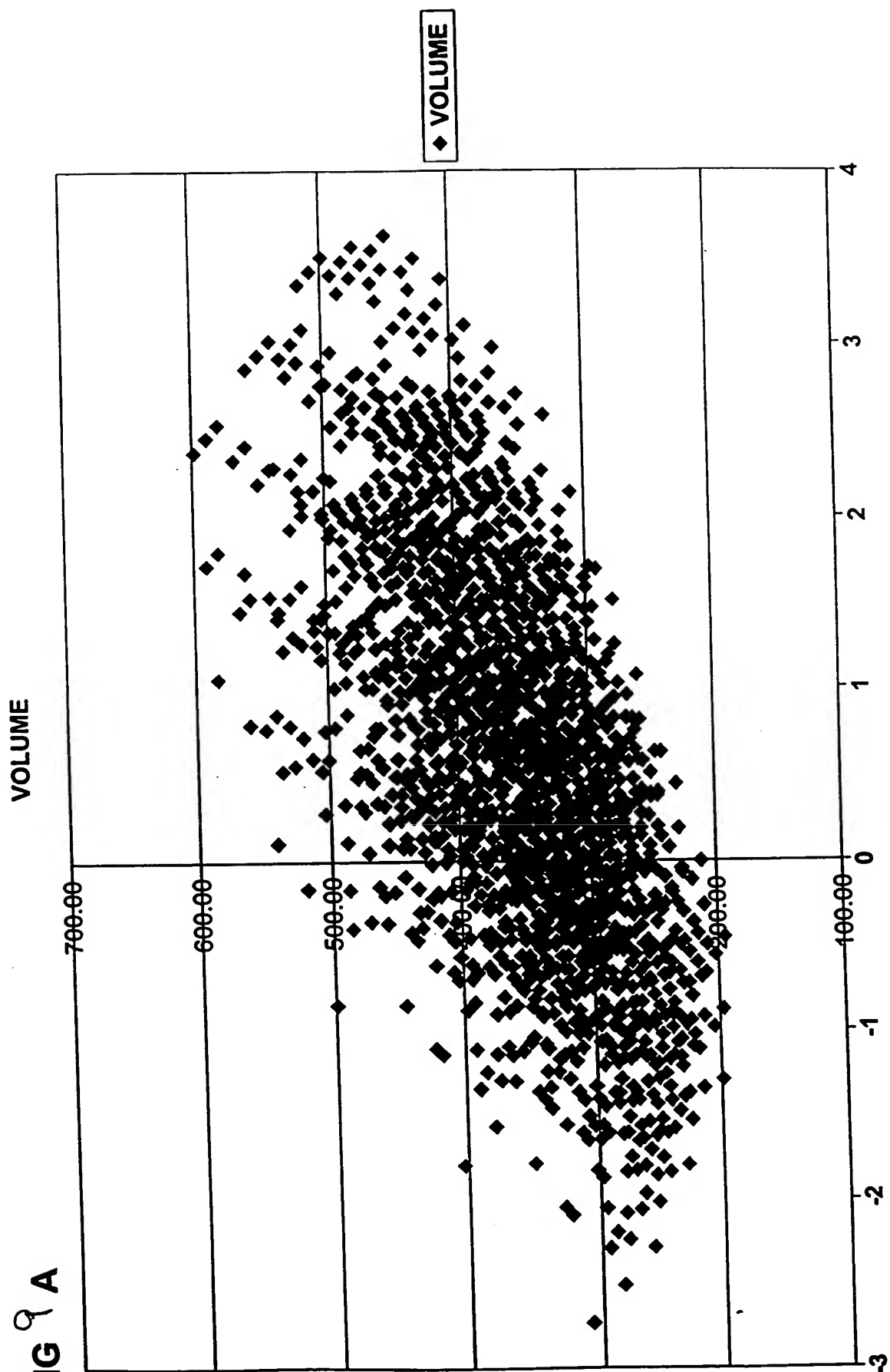


FIG 9 B

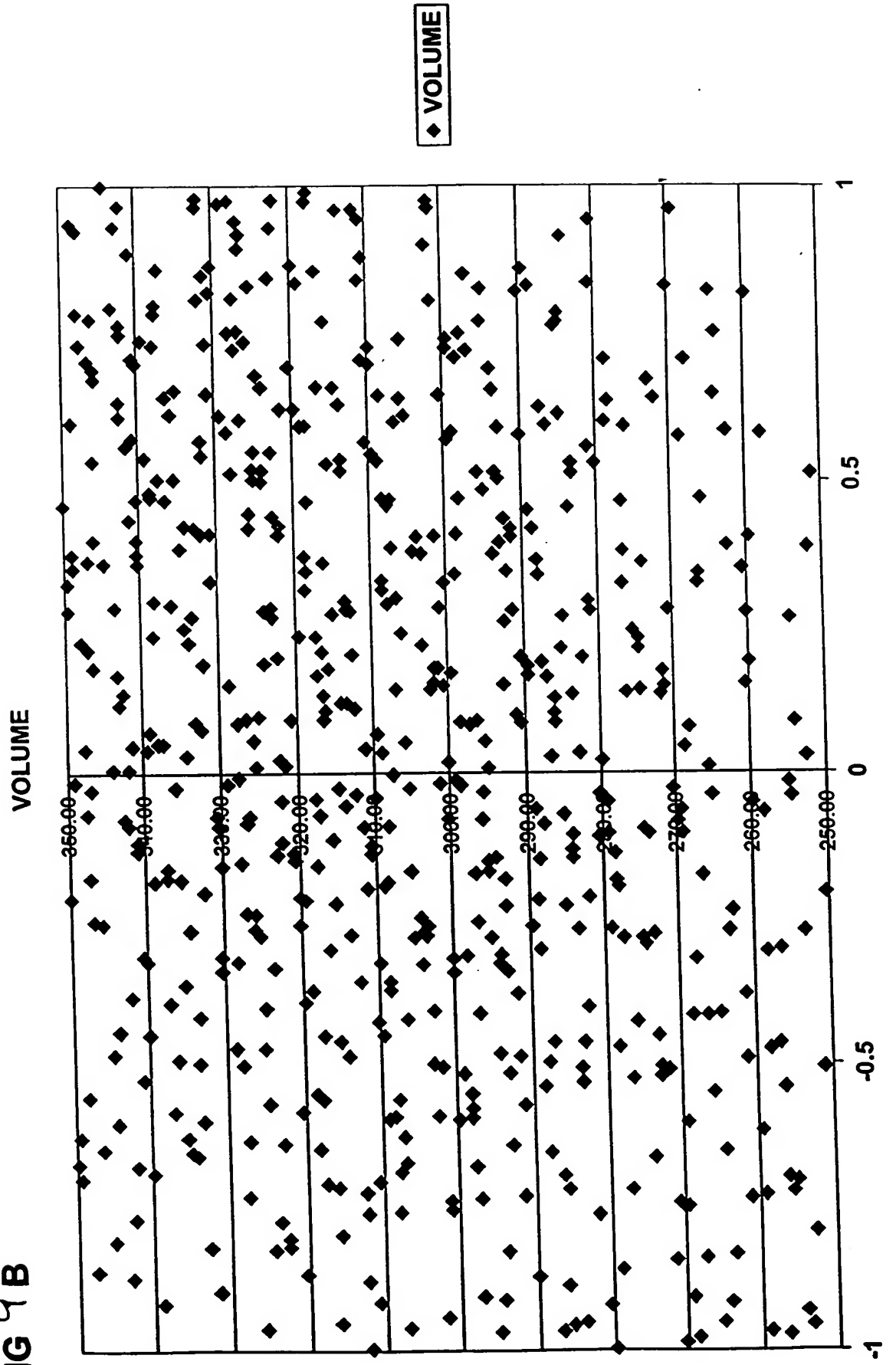


FIG. 10

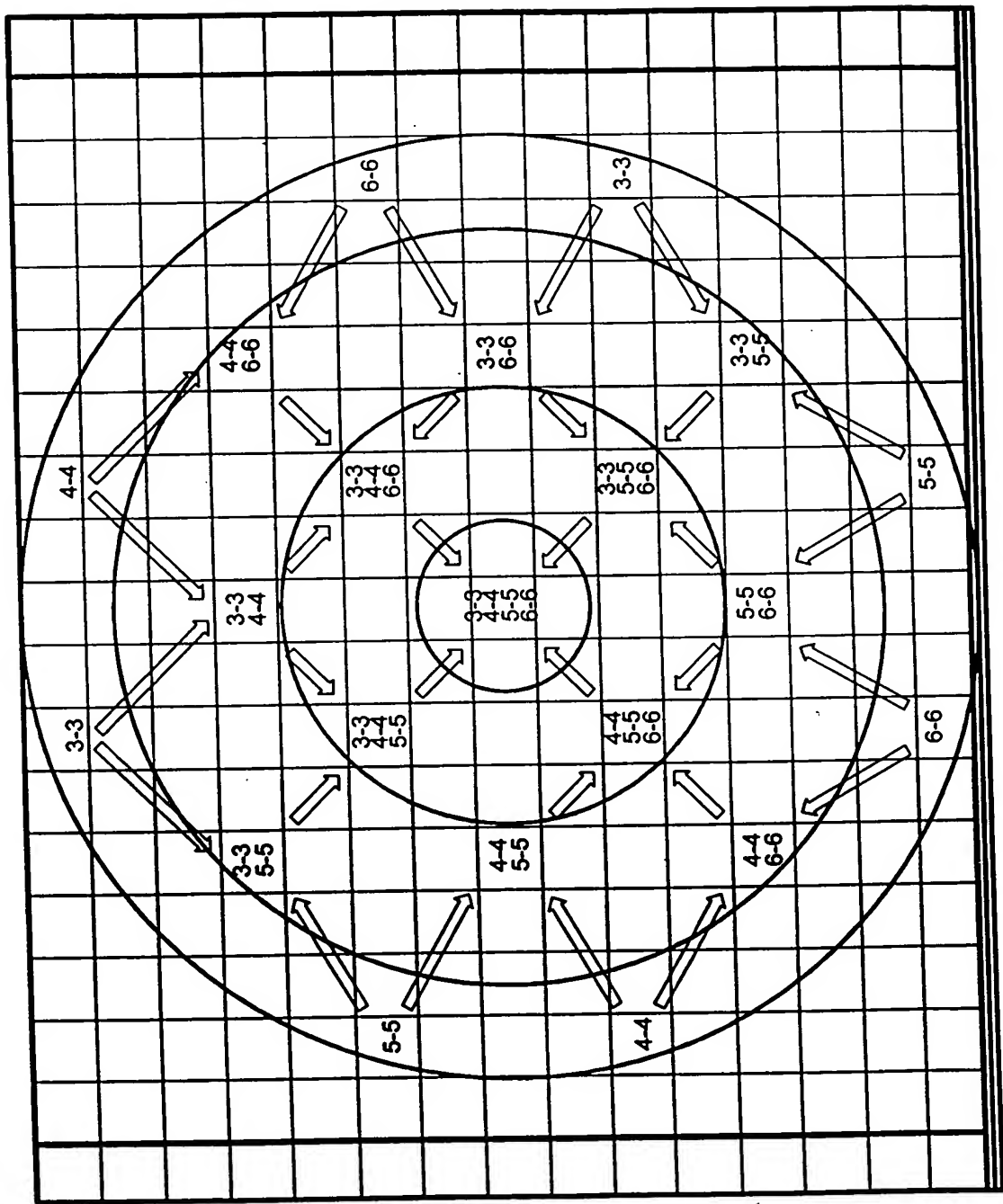


FIG. 1

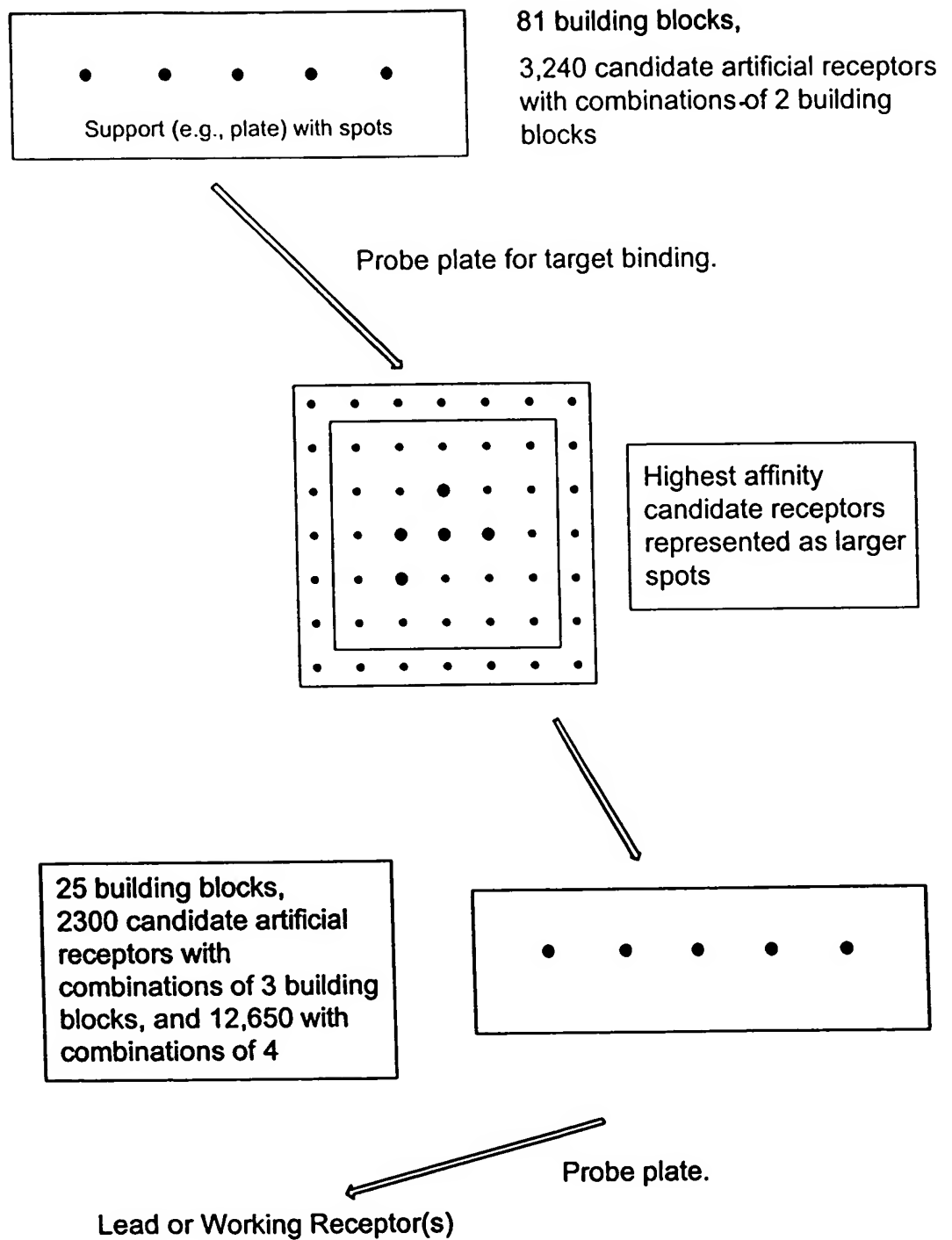
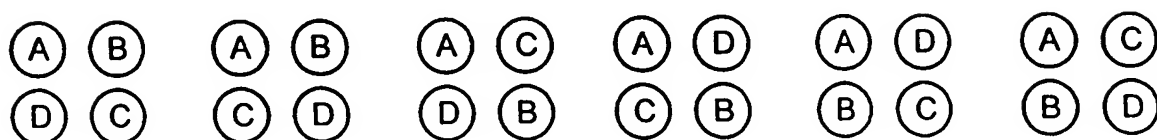
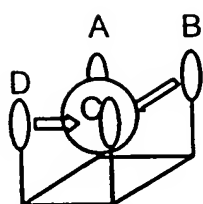


FIG 12

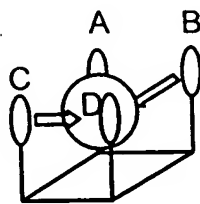
6 POSITIONAL ISOMERS OF 4 BUILDING BLOCKS AT
VERTICES OF A QUADRILATERAL



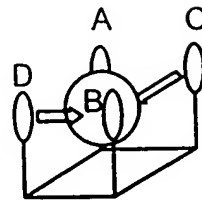
POSITIONAL ISOMERS ON A SCAFFOLD



ISOMER "1"



ISOMER "2"



ISOMER "3"

FIG. 13A

SIDE VIEW

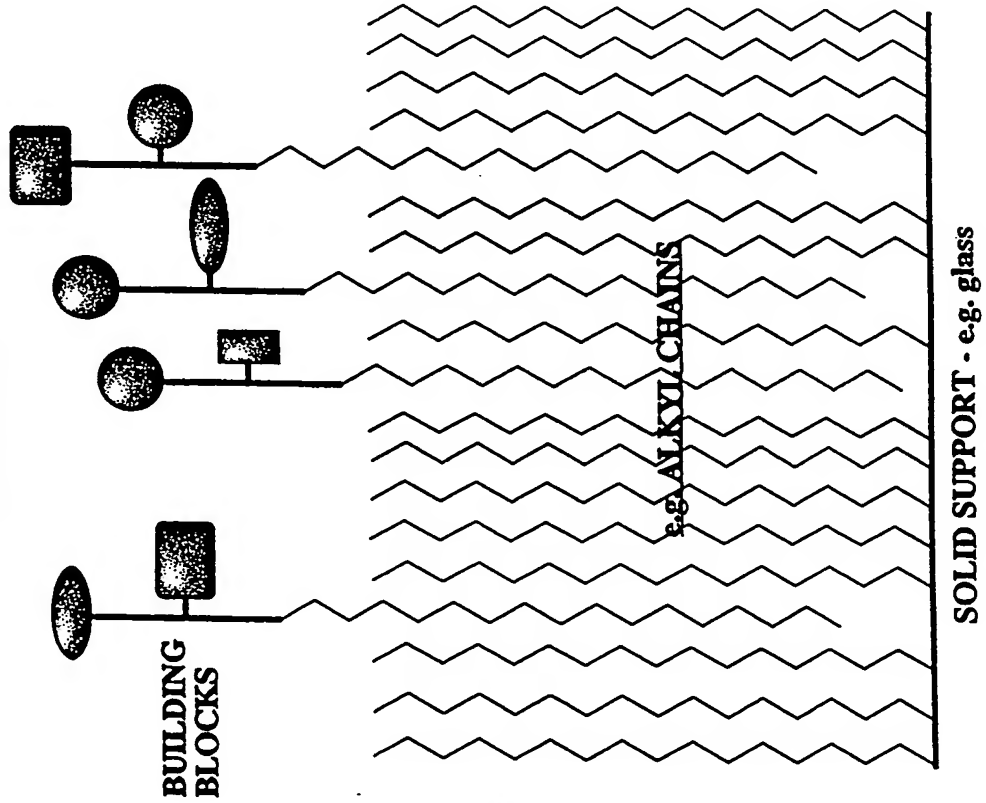
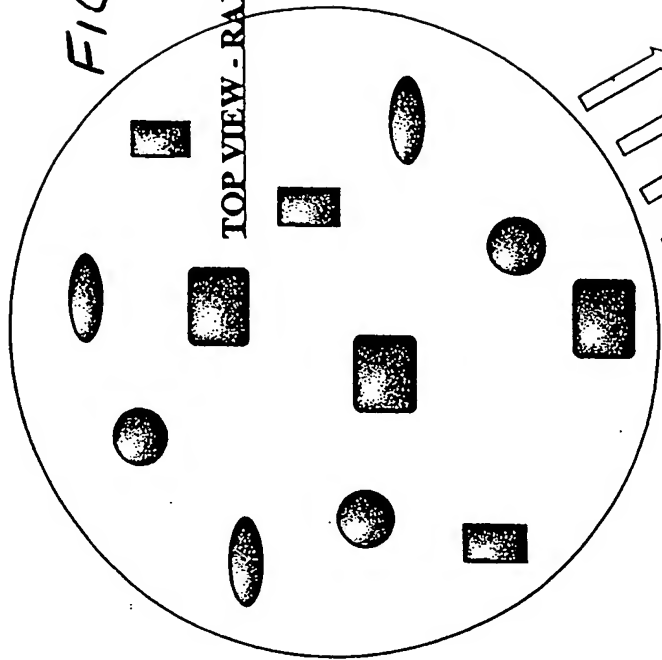


FIG. 13B

TOP VIEW - RANDOM DISTRIBUTION



TOP VIEW -

BINDING DISTRIBUTION

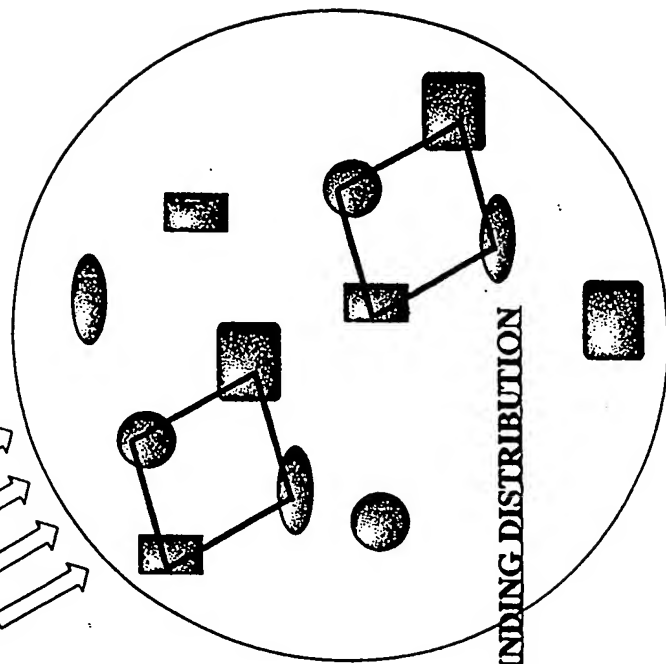


FIG 14

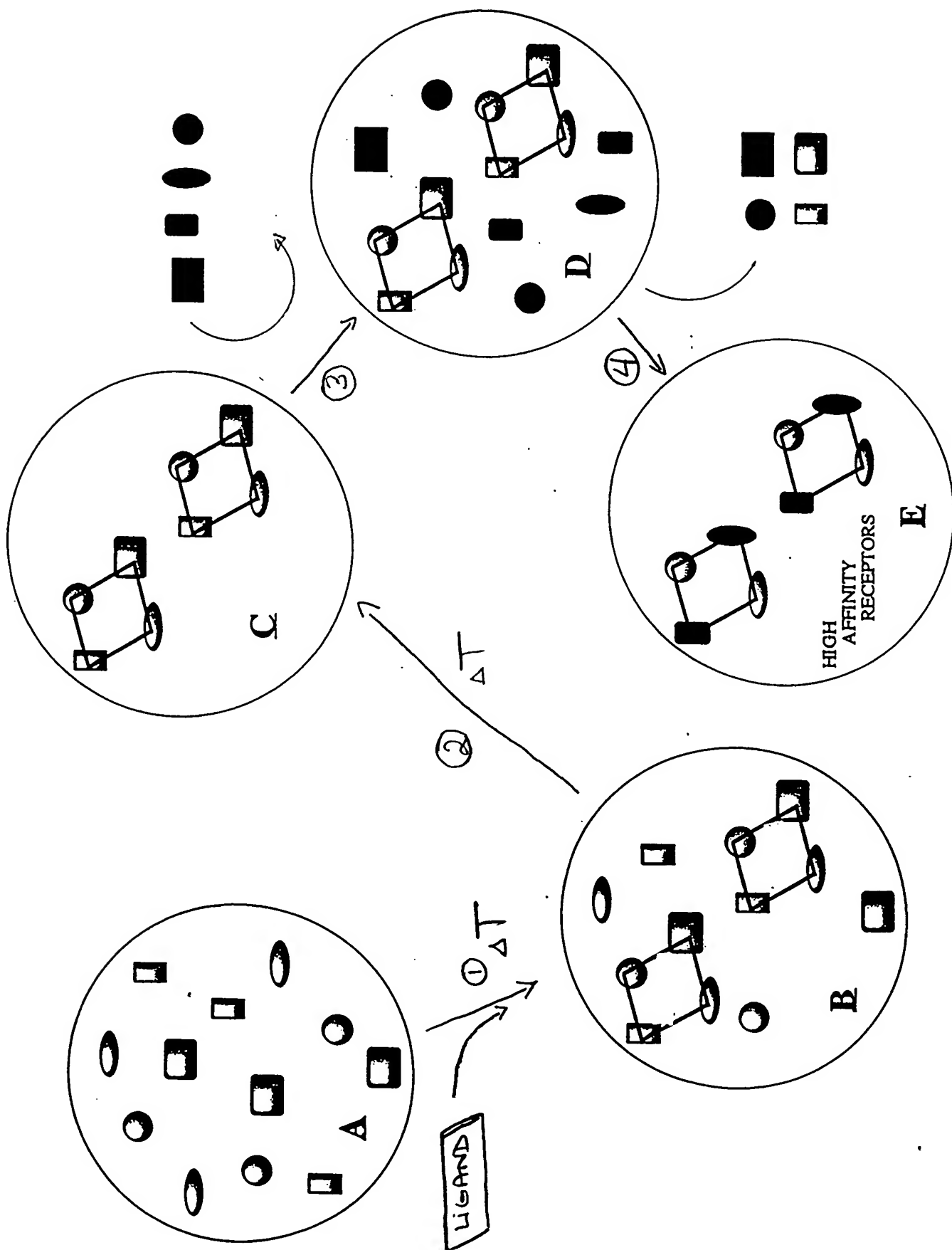
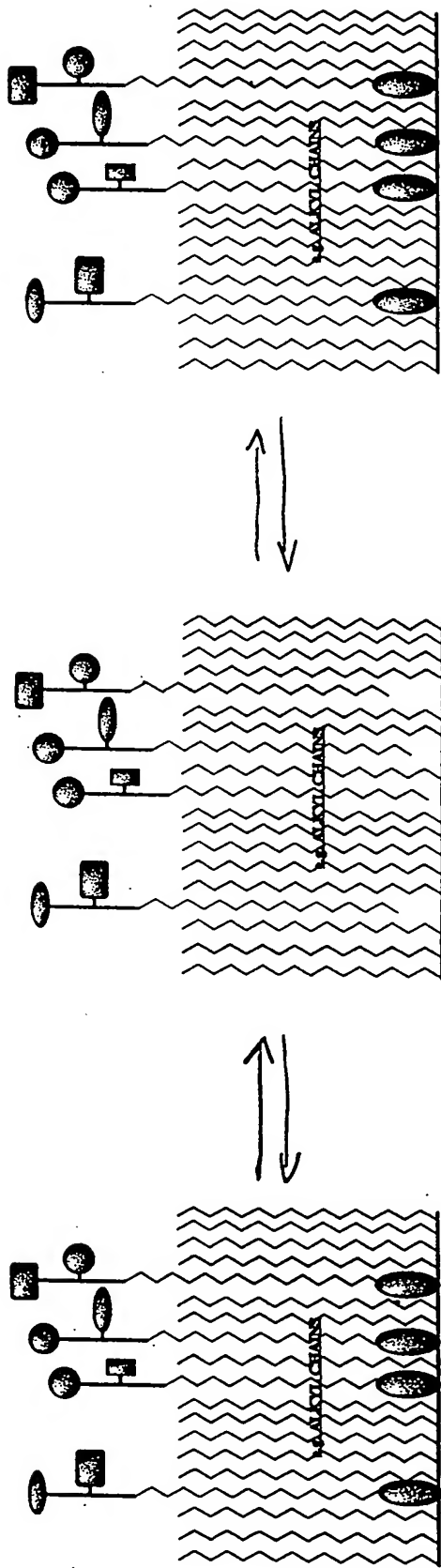
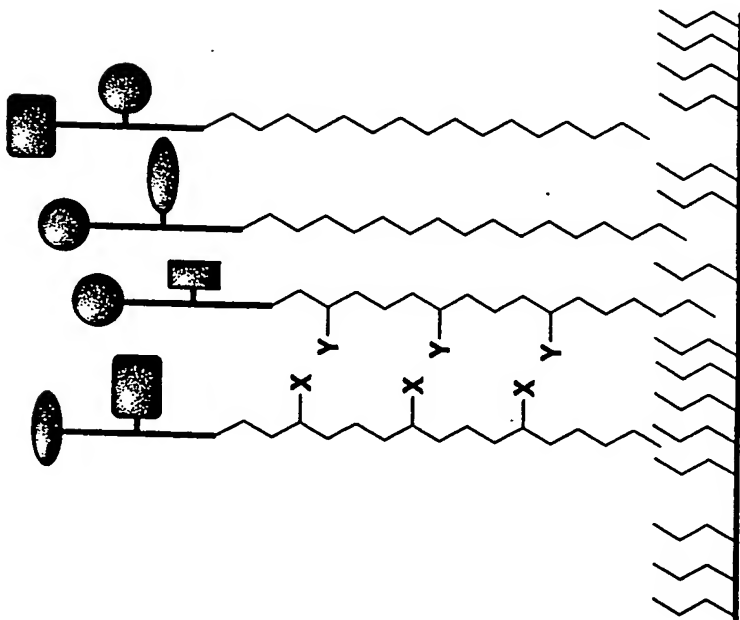


FIG 15

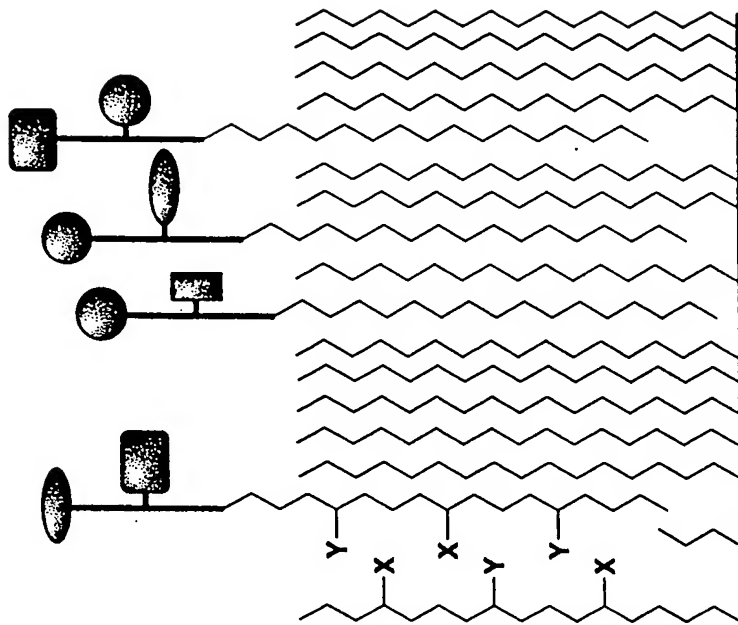


● = reversible bond

FIG 16

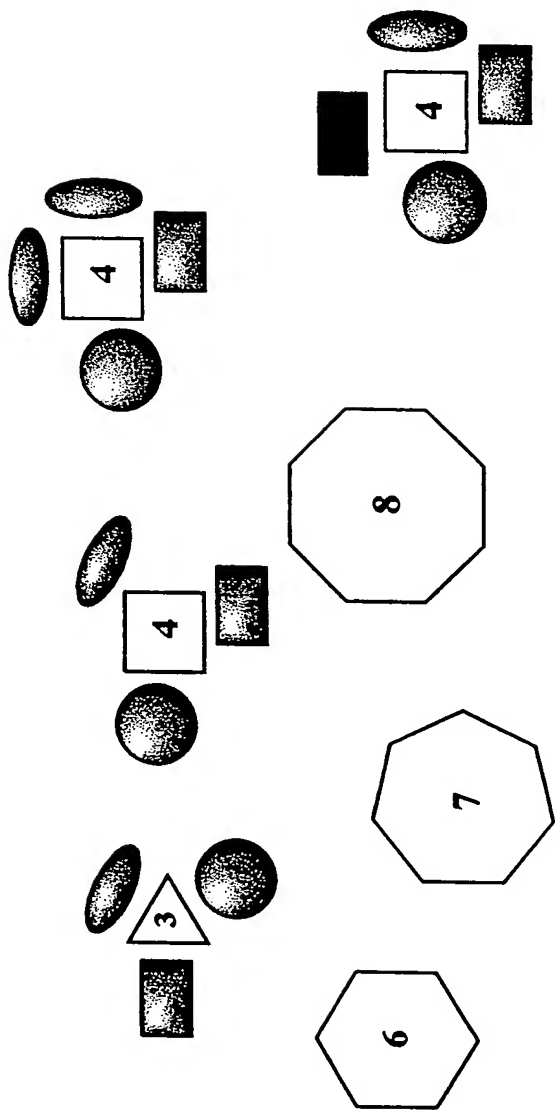


A



B

Fig 17



| N = 81 Building Blocks | |
|------------------------|----------------|
| n=3 => | 85,320 |
| n=4 => | 1,663,740 |
| n=5 => | 25,621,596 |
| n=6 => | 328,810,482 |
| n=7 => | 3,522,969,450 |
| n=8 => | 32,587,467,412 |

FIG.18

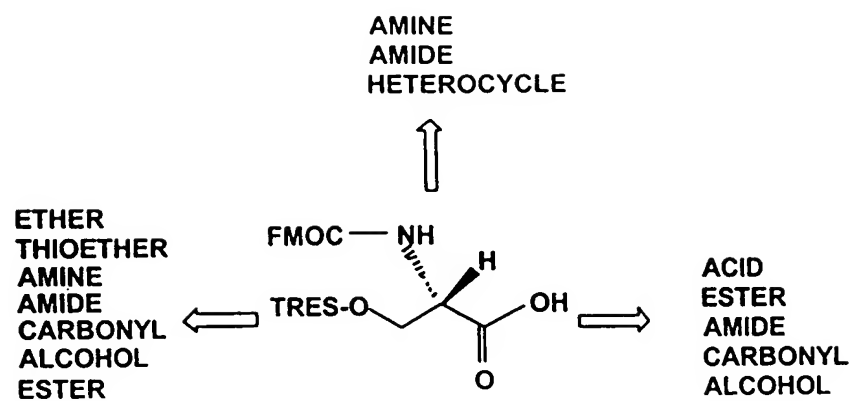


FIG. R

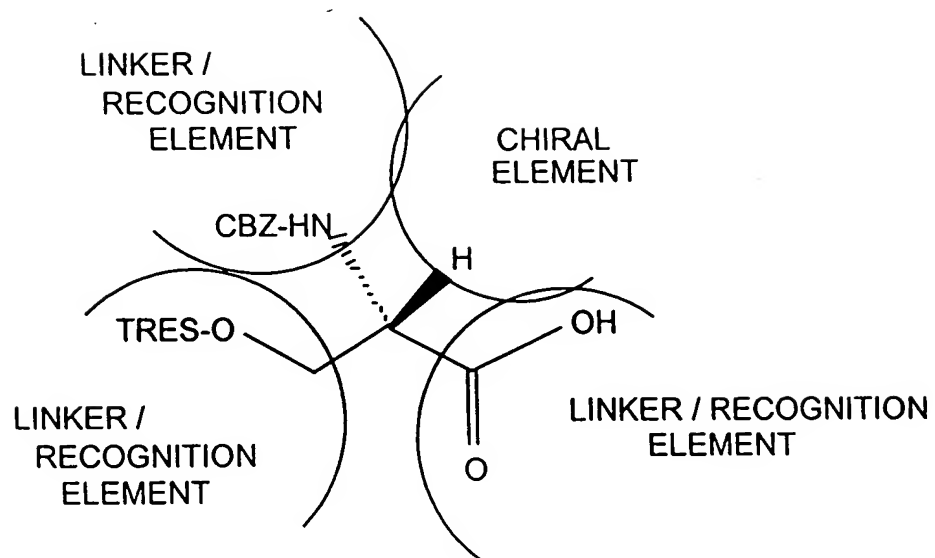


FIG. 20

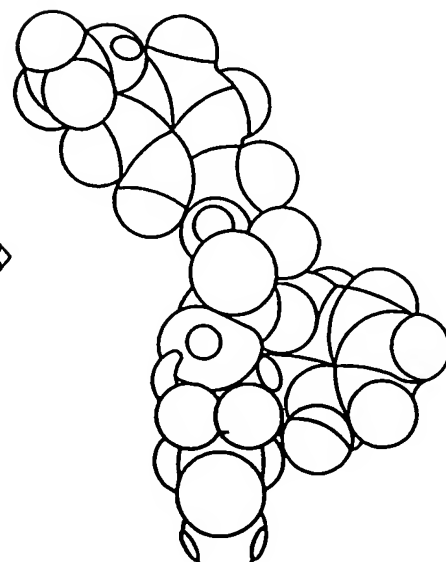
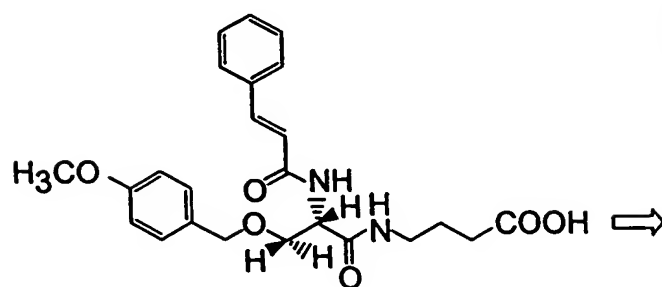
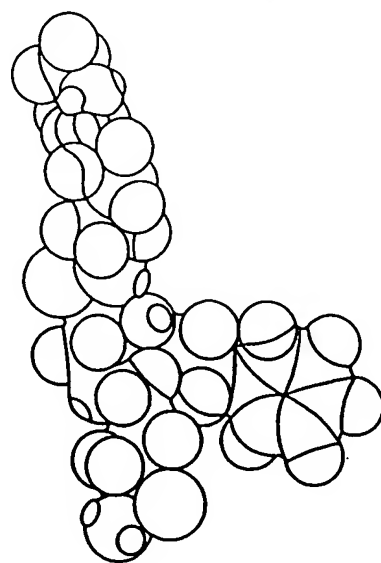
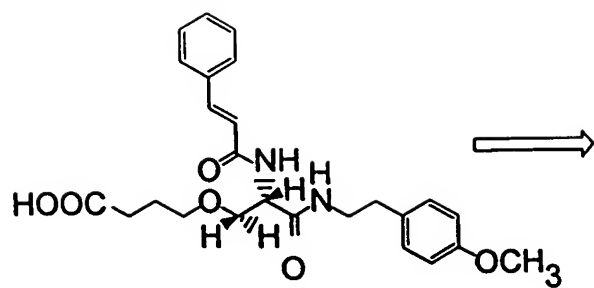
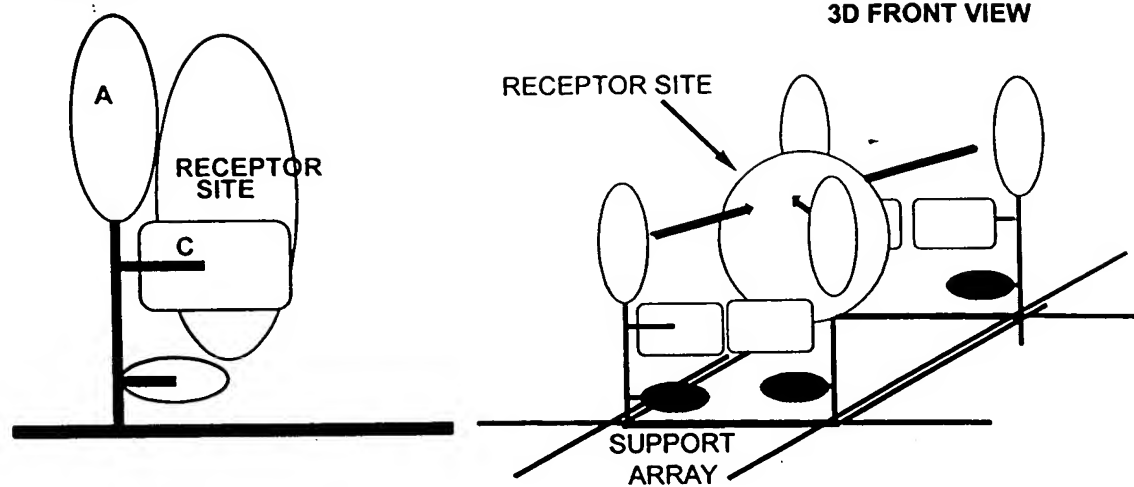


FIG. 2A

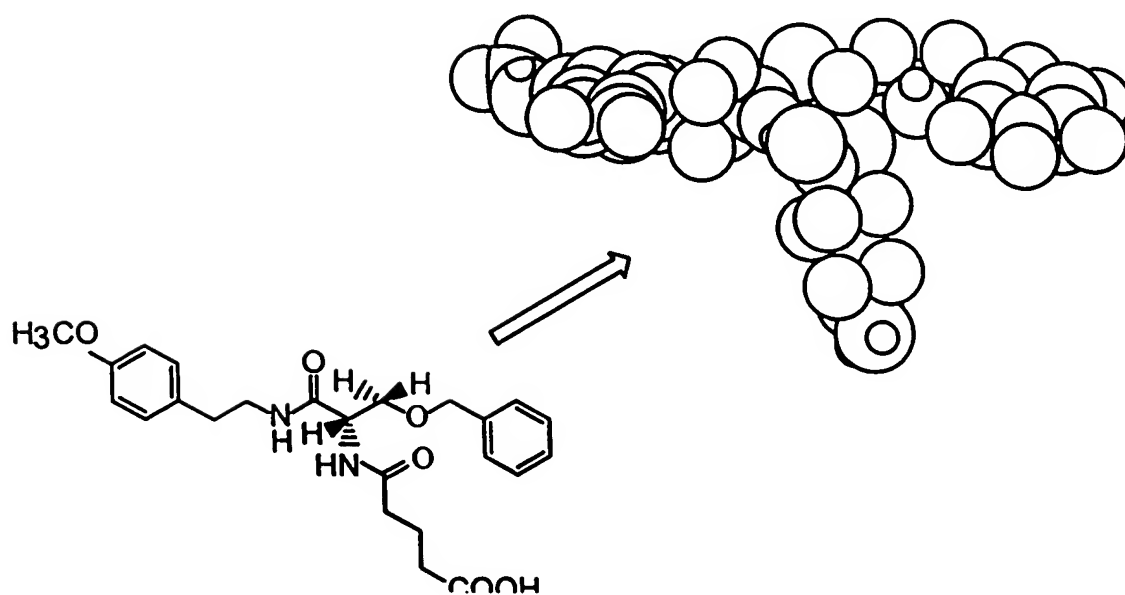
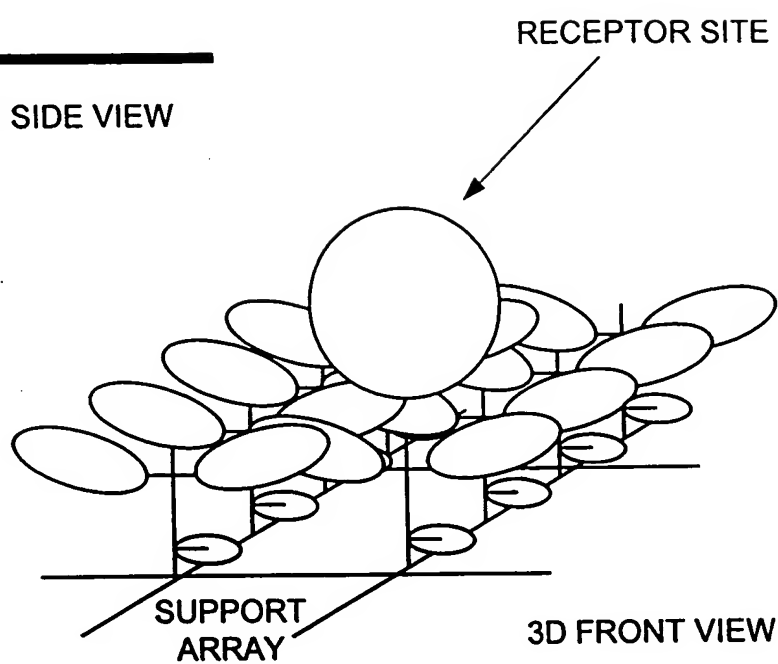
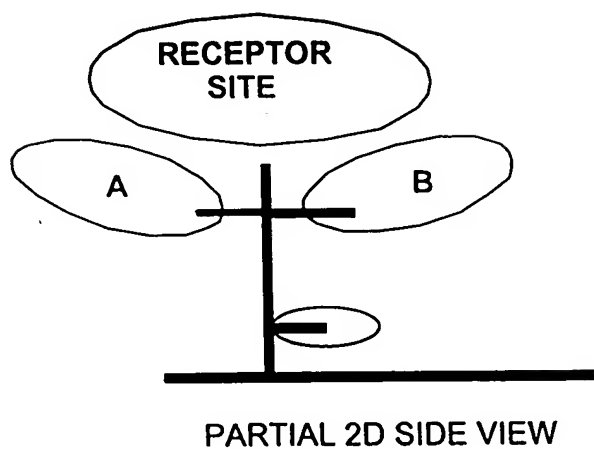
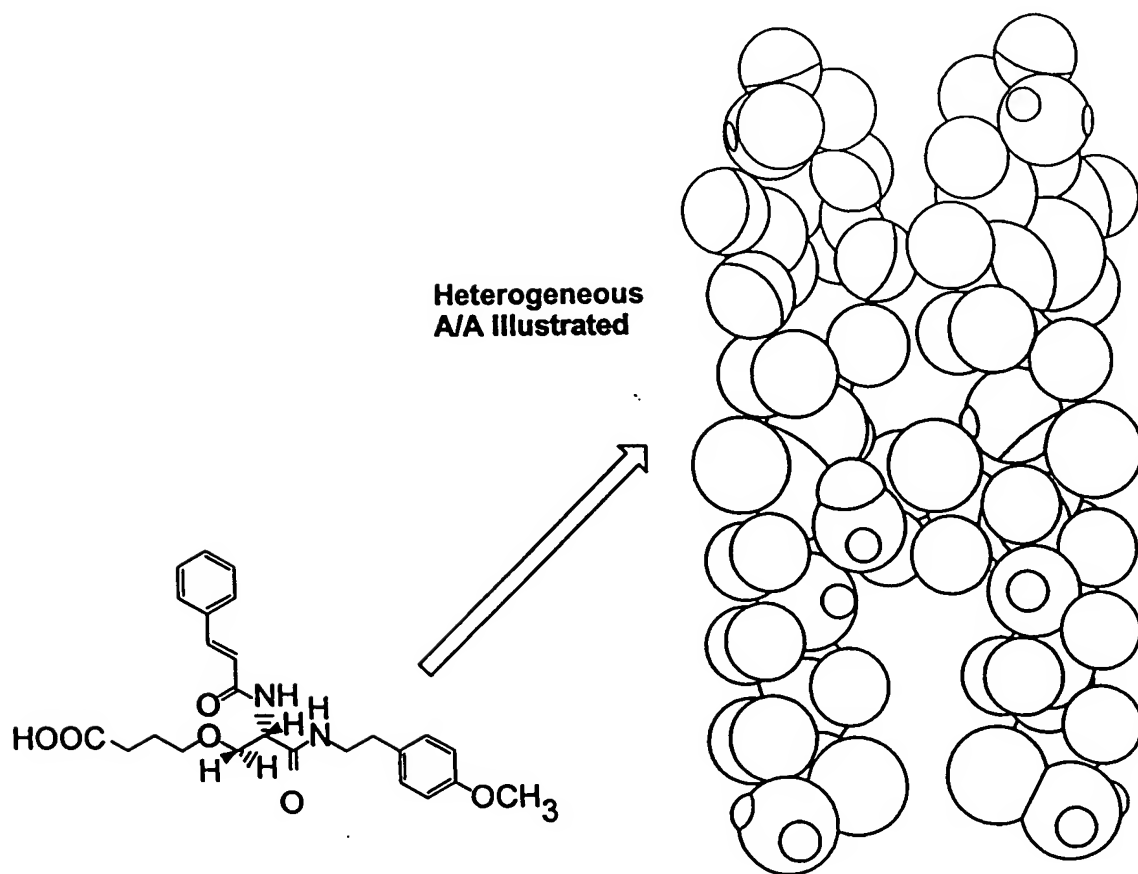
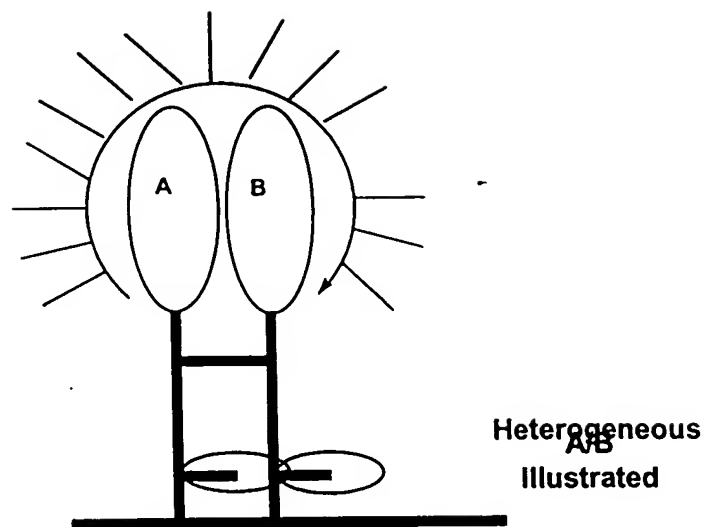


FIG. 22



FILE NAME: 23A.GIF
DATE: 03/09/02
TIME: 11:14:50
WAVELENGTH: 532
GAIN: 100
EXPOSURE: 1000
RESOLUTION: 1024x1024

FIGURE 23A GRAY SCALE IMAGE
OF A 2 ug/ml r-PHYCOERYTHRIN
CARA MICROARRAY.

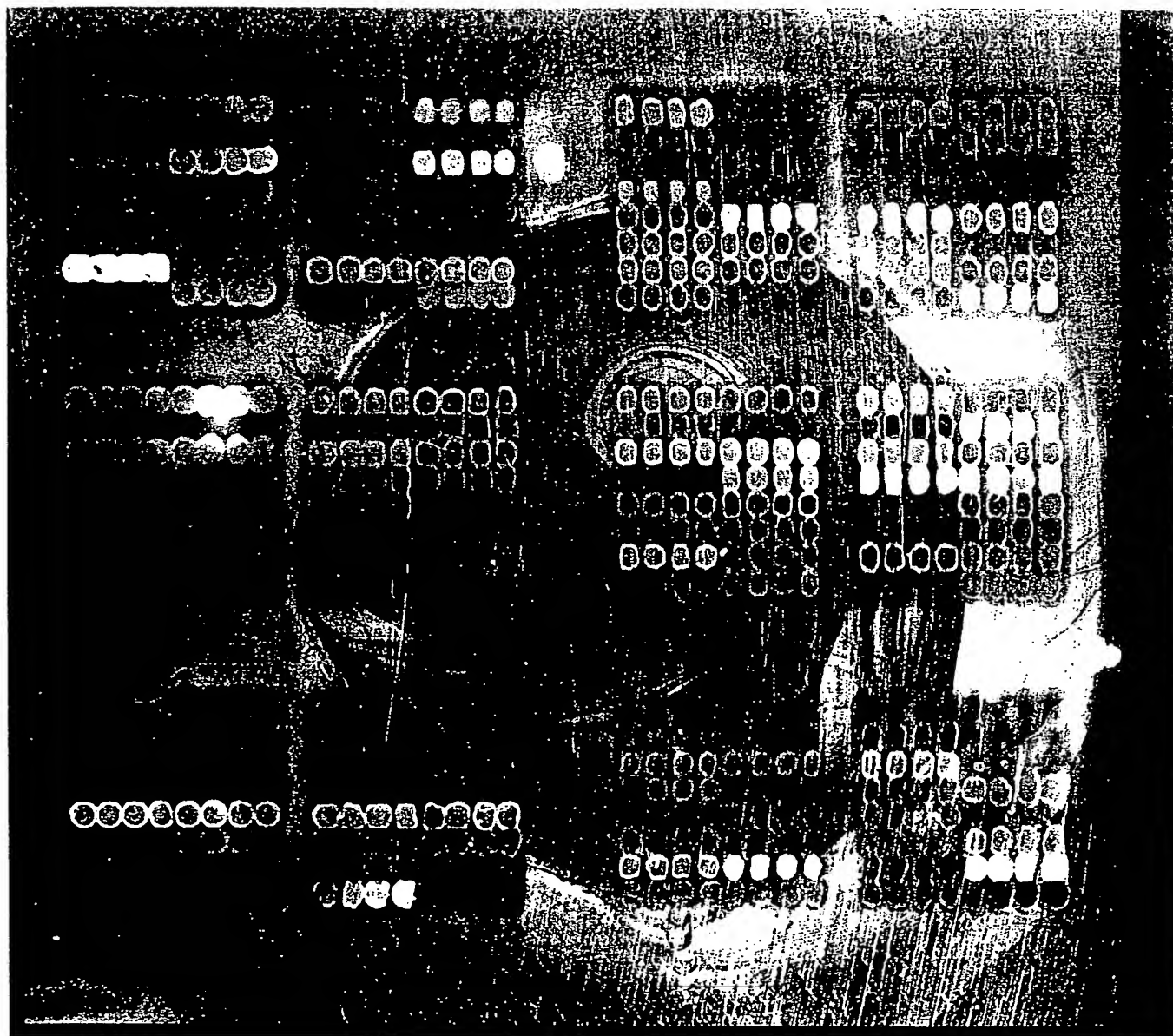


Fig. 24
2D

plot R-PHYCOERYTHRIN

PHYCO

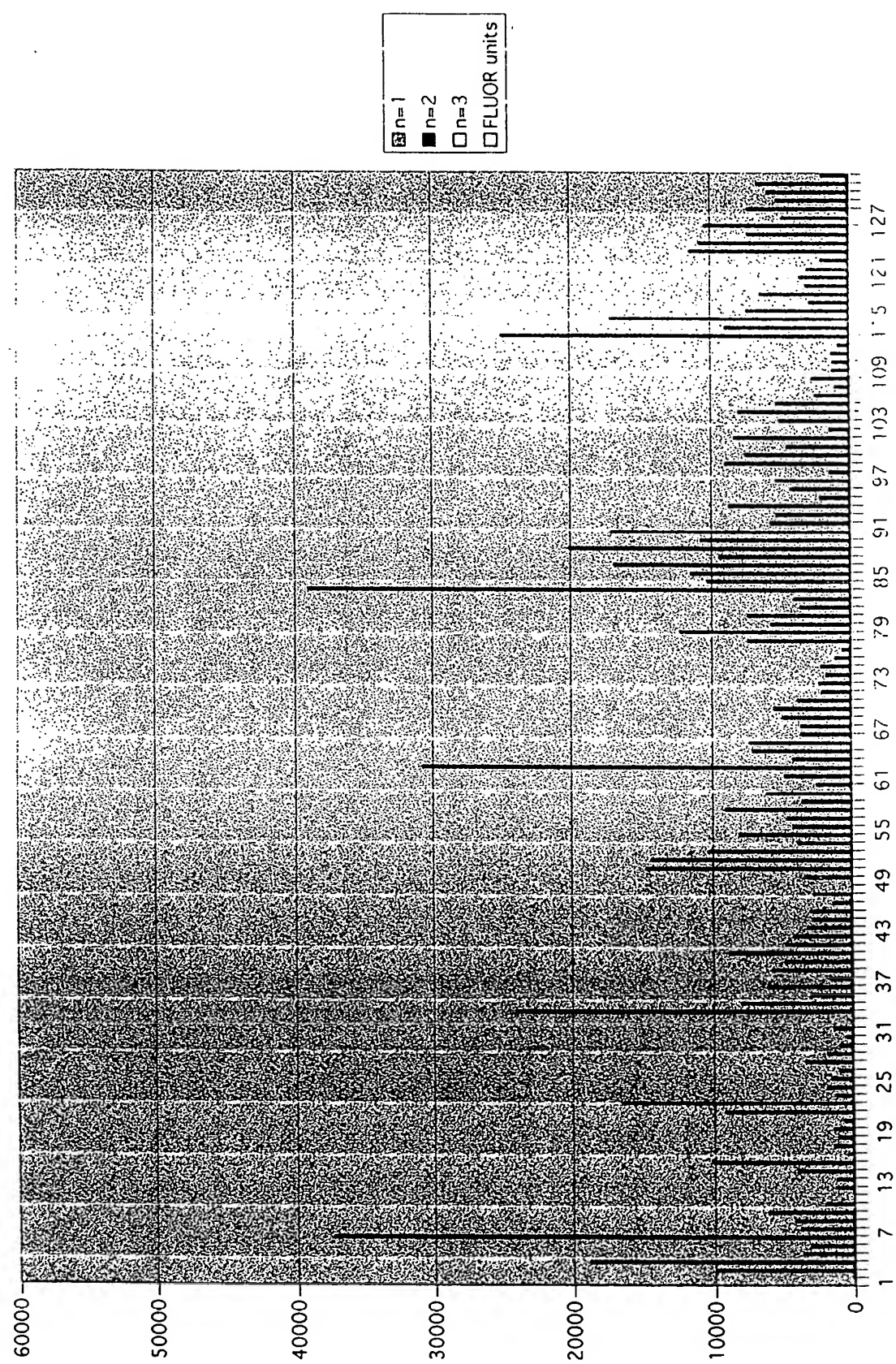


FIGURE 25

R-PHYCOERYTHRIN

3D 1 Plot

N9 : PHYCO : n=1, n=2, n=3

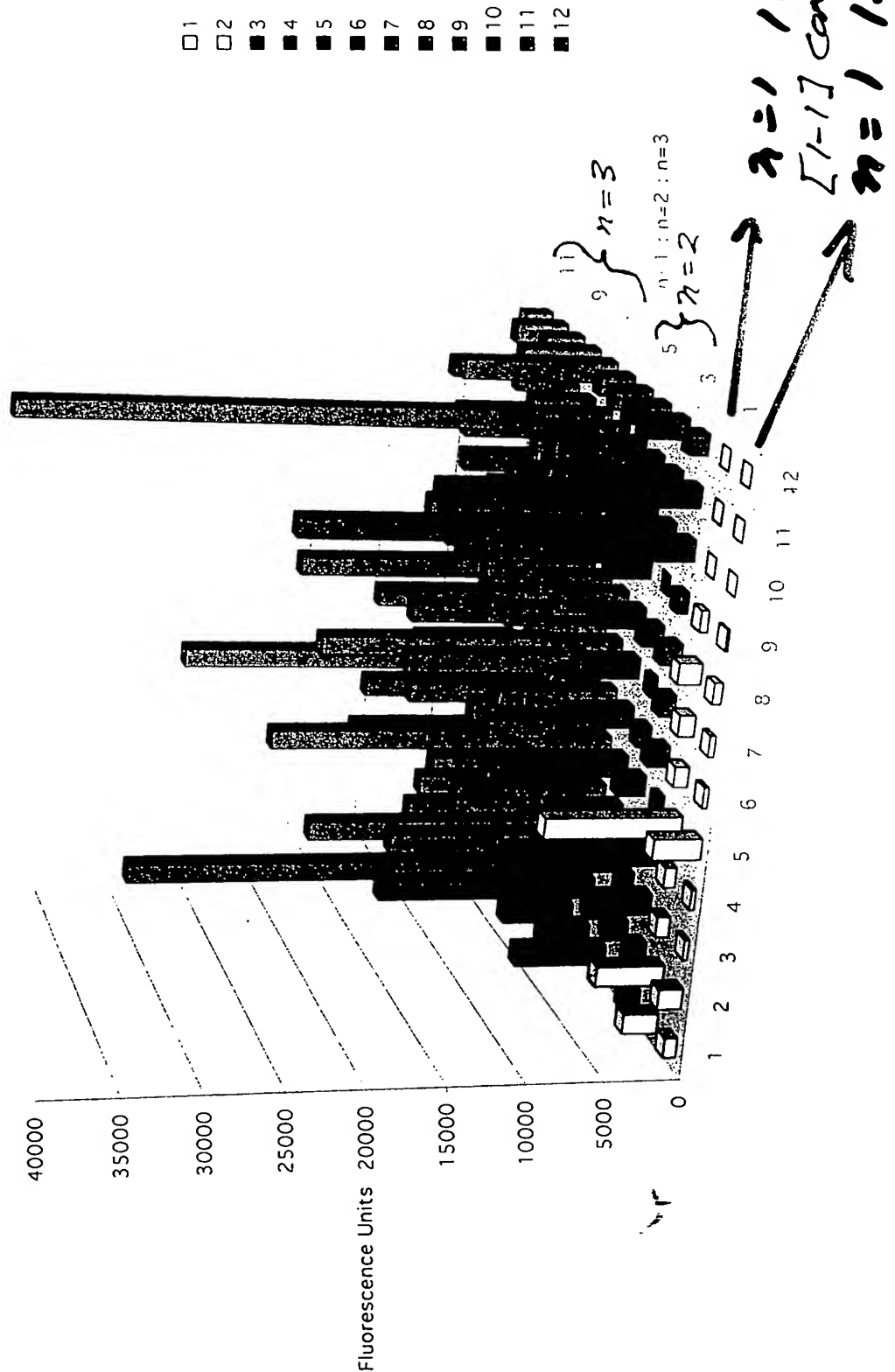


FIGURE 26

2D Plot

ORVAL BURN
OVAL1

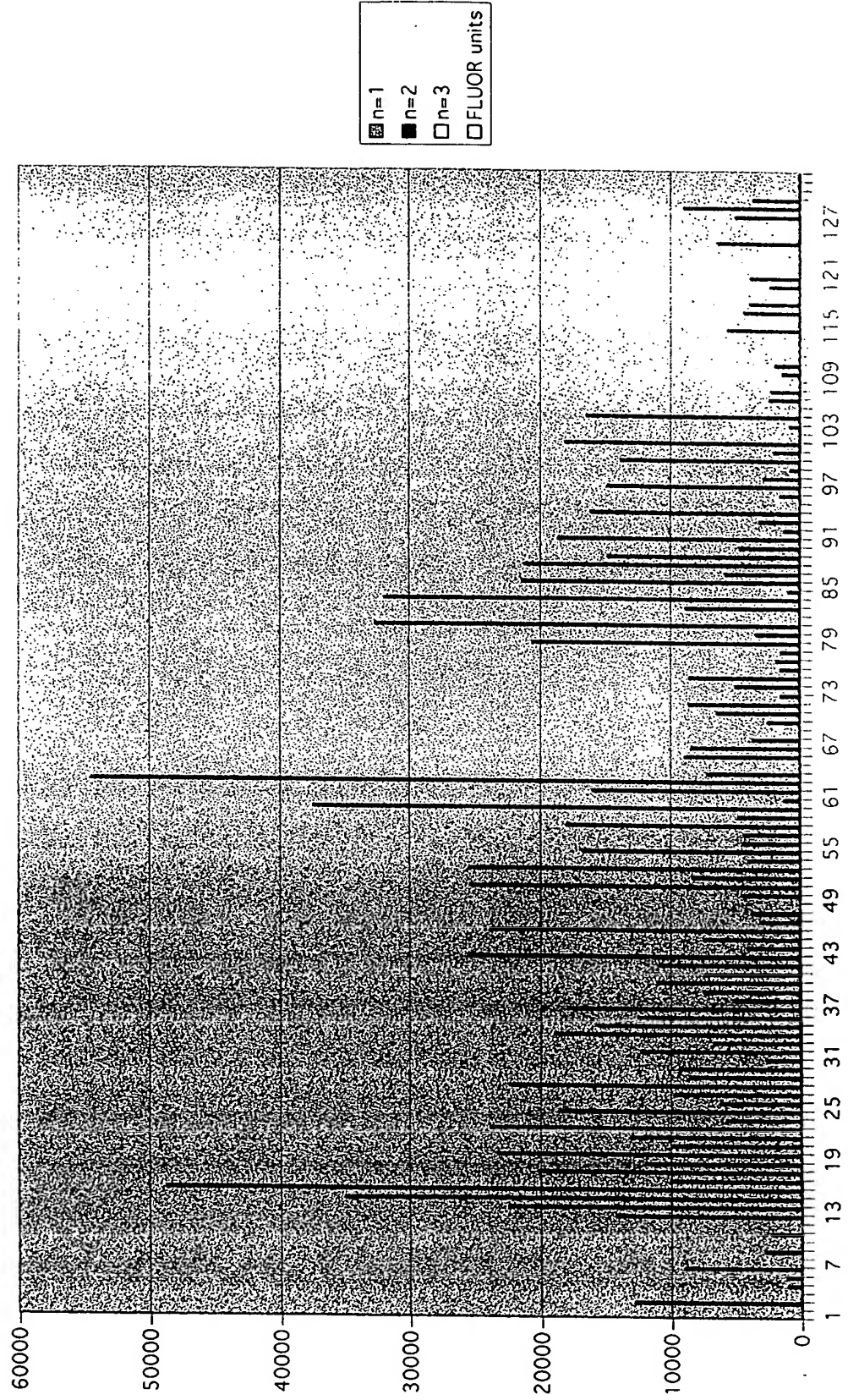


FIGURE 27

3D PLOT

ORVAL B4 MIN

N=9 n=1, n=2, n=3 COMBINATIONS OVAL 1

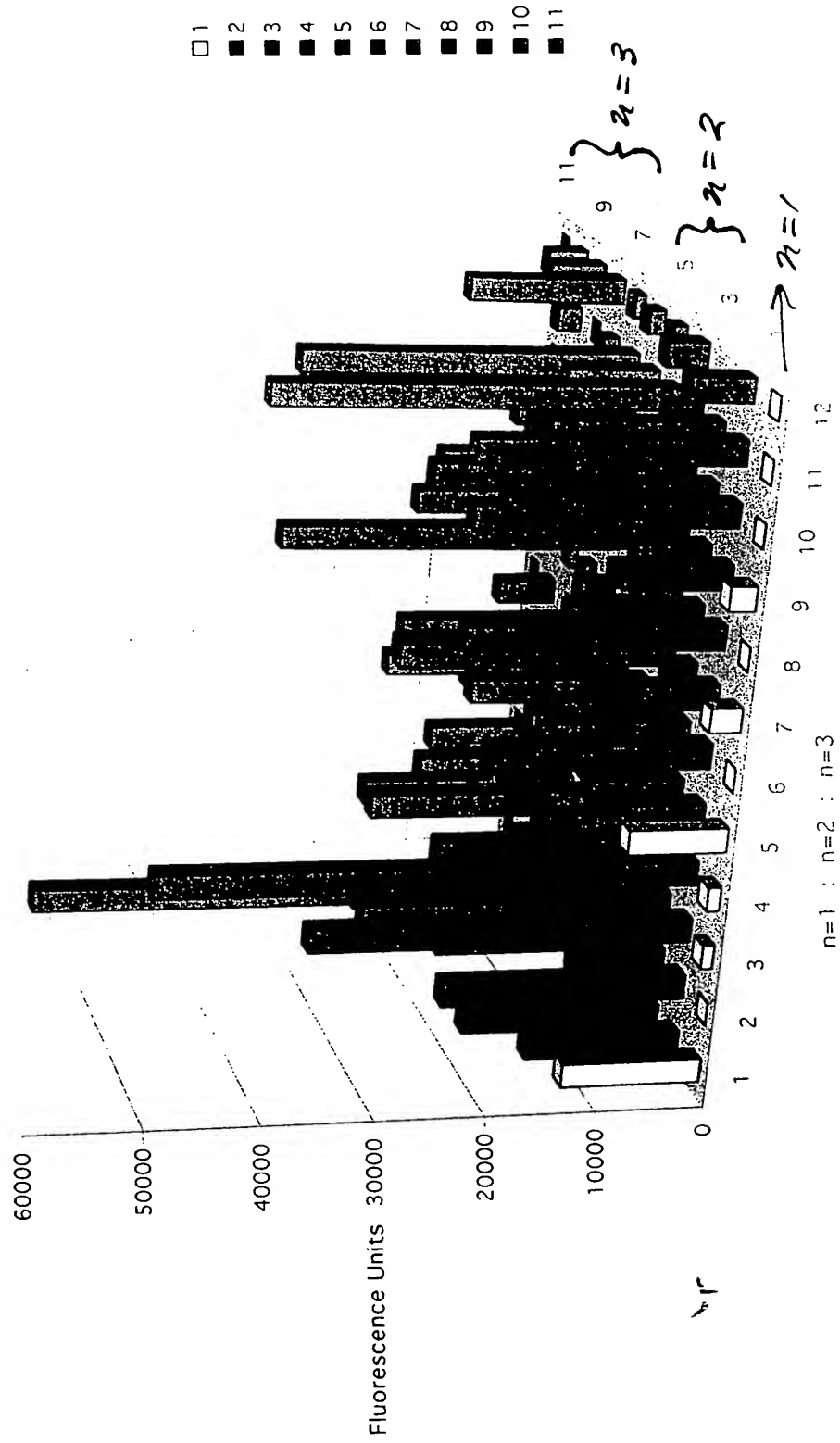


FIGURE 28 BOVINE SERUM ALBUMIN
 2D plot RHO₂ - BSA

RHO₁ - BSA

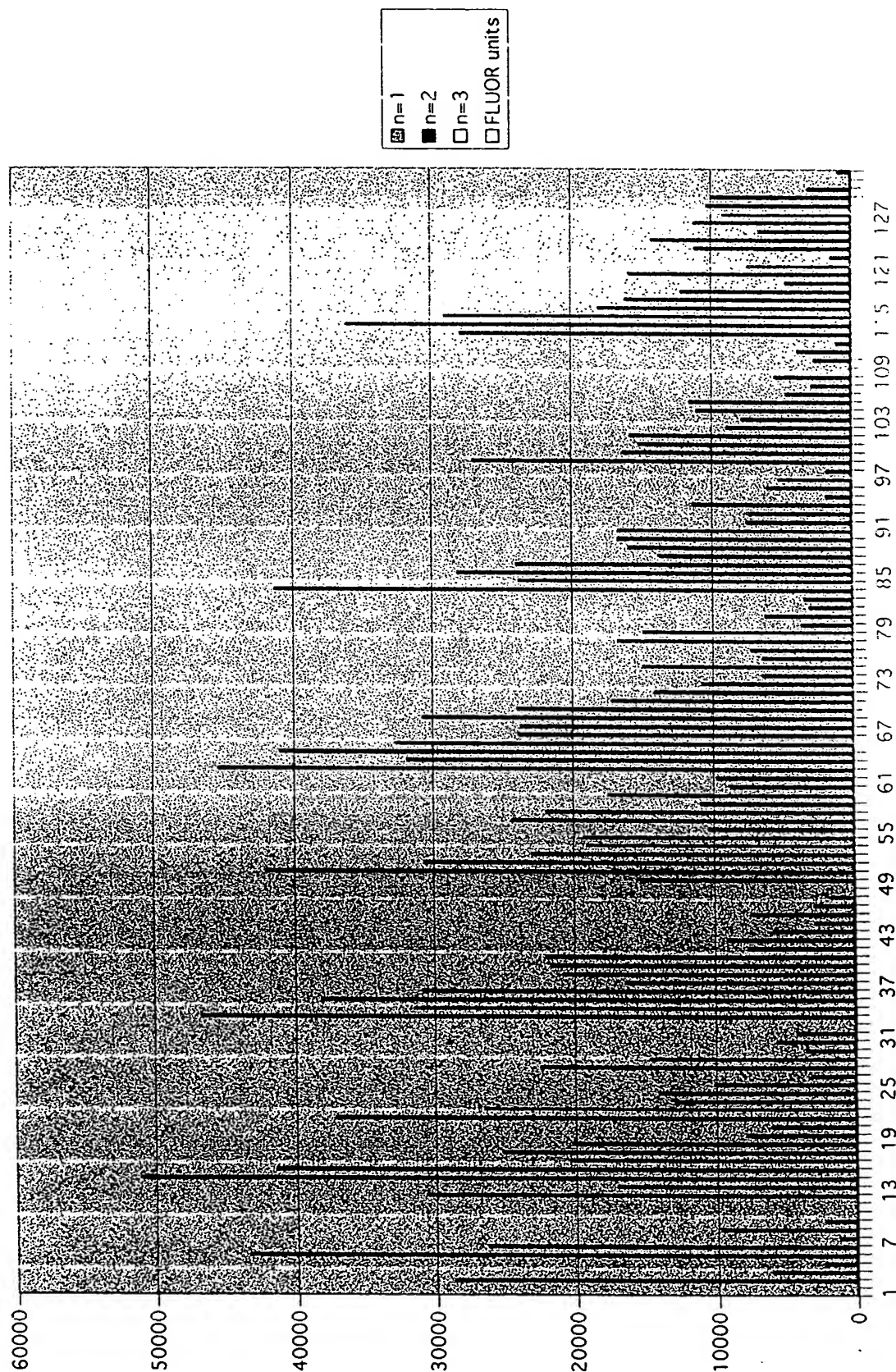


FIGURE 30
2D CORRELATION PLOT HARP-NH-Ac "1.0x"

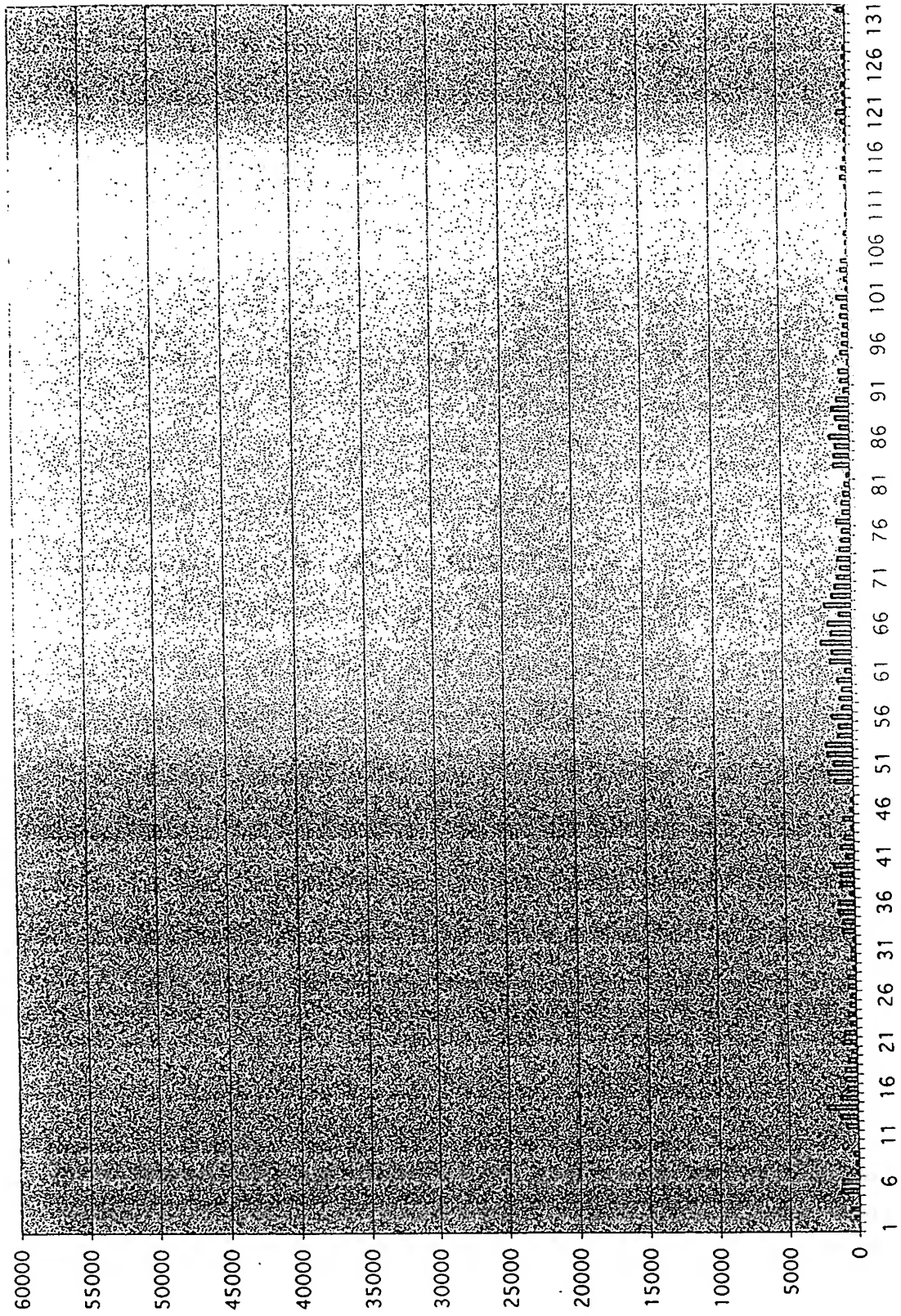


FIGURE 31

HRP-NH-Ac

3D
plot

N=9 n=1, n=2, n=3 COMBINATIONS HRP-NH-Ac

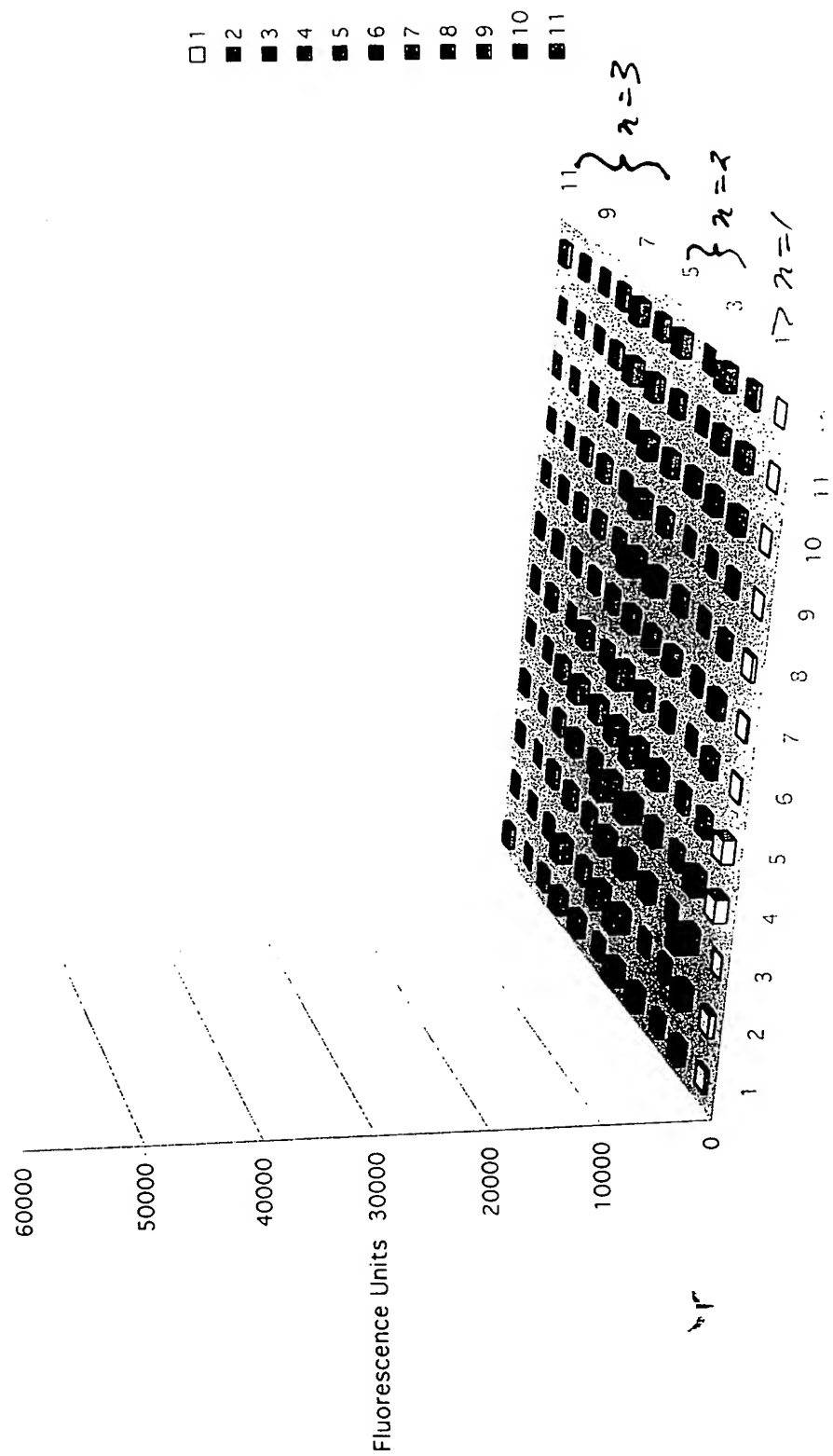


FIGURE 32
2D Plot ~~HRP-PCDD~~ HRP-TCDD

HRP-TCDD

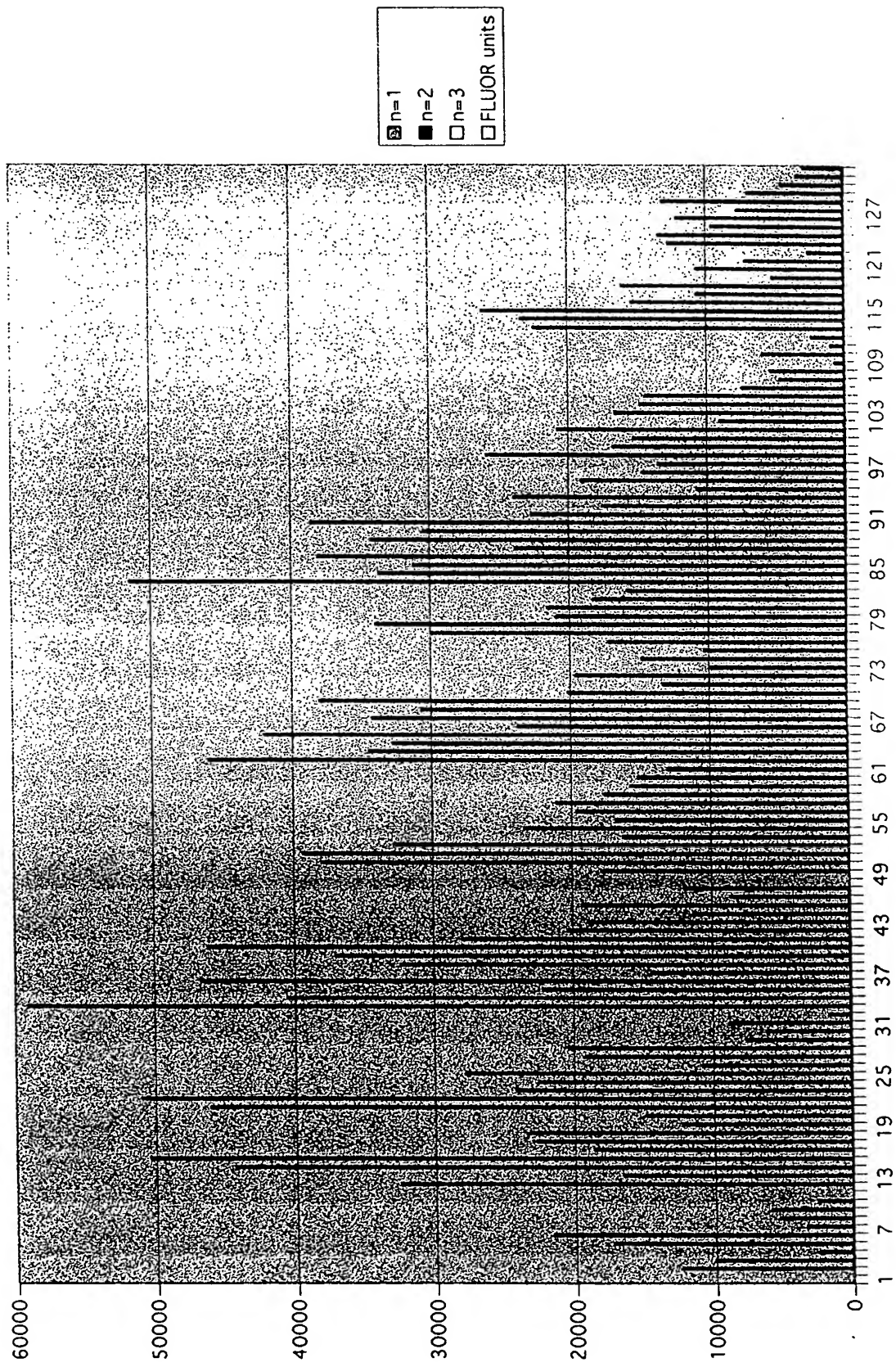


Figure 33

3D Plot

HRP-7cDD

N=9 n=1, n=2, n=3 COMBINATIONS HRP-PCDD

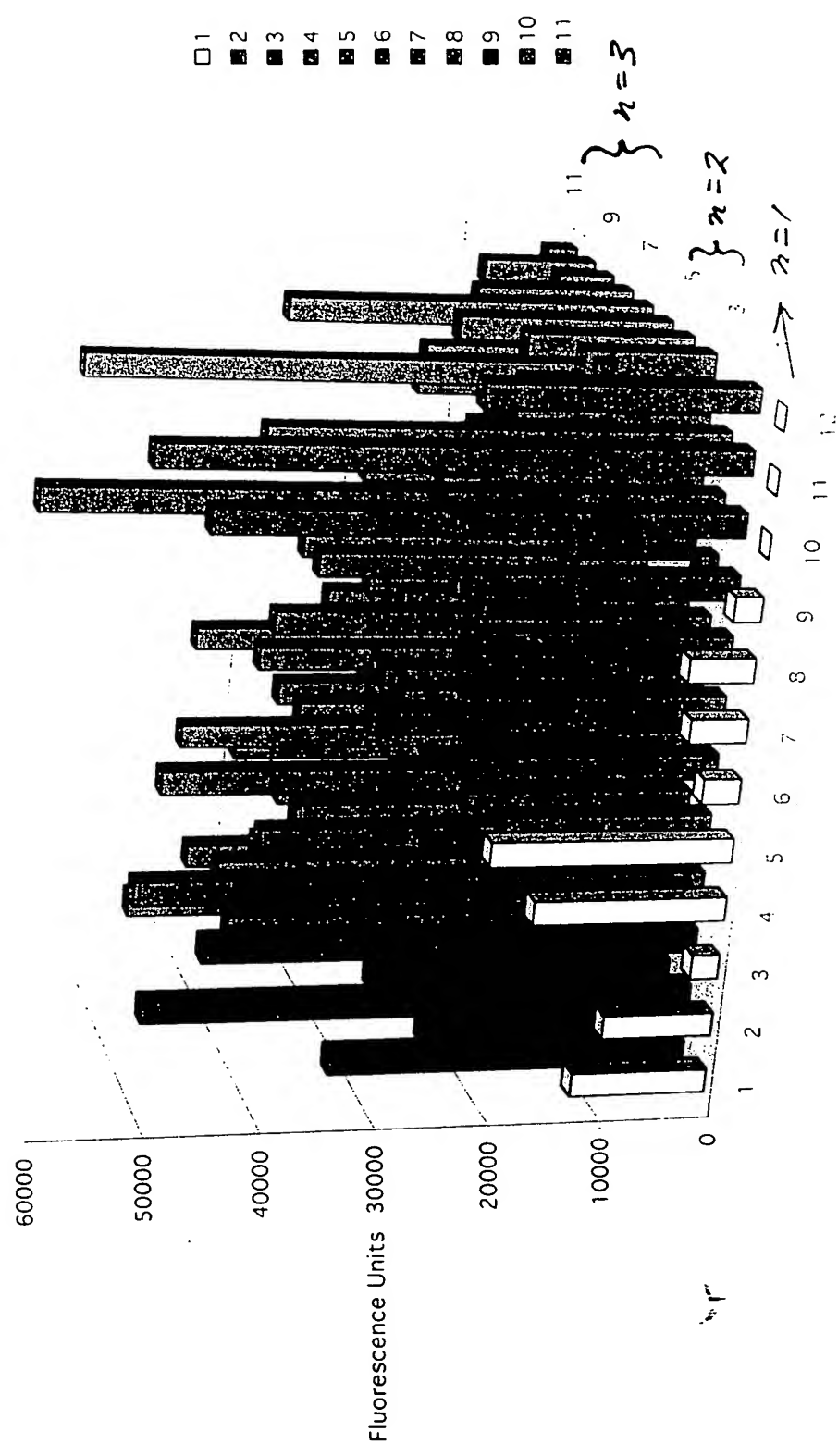


FIGURE 34 BLOCK 8 DATA PLOT.

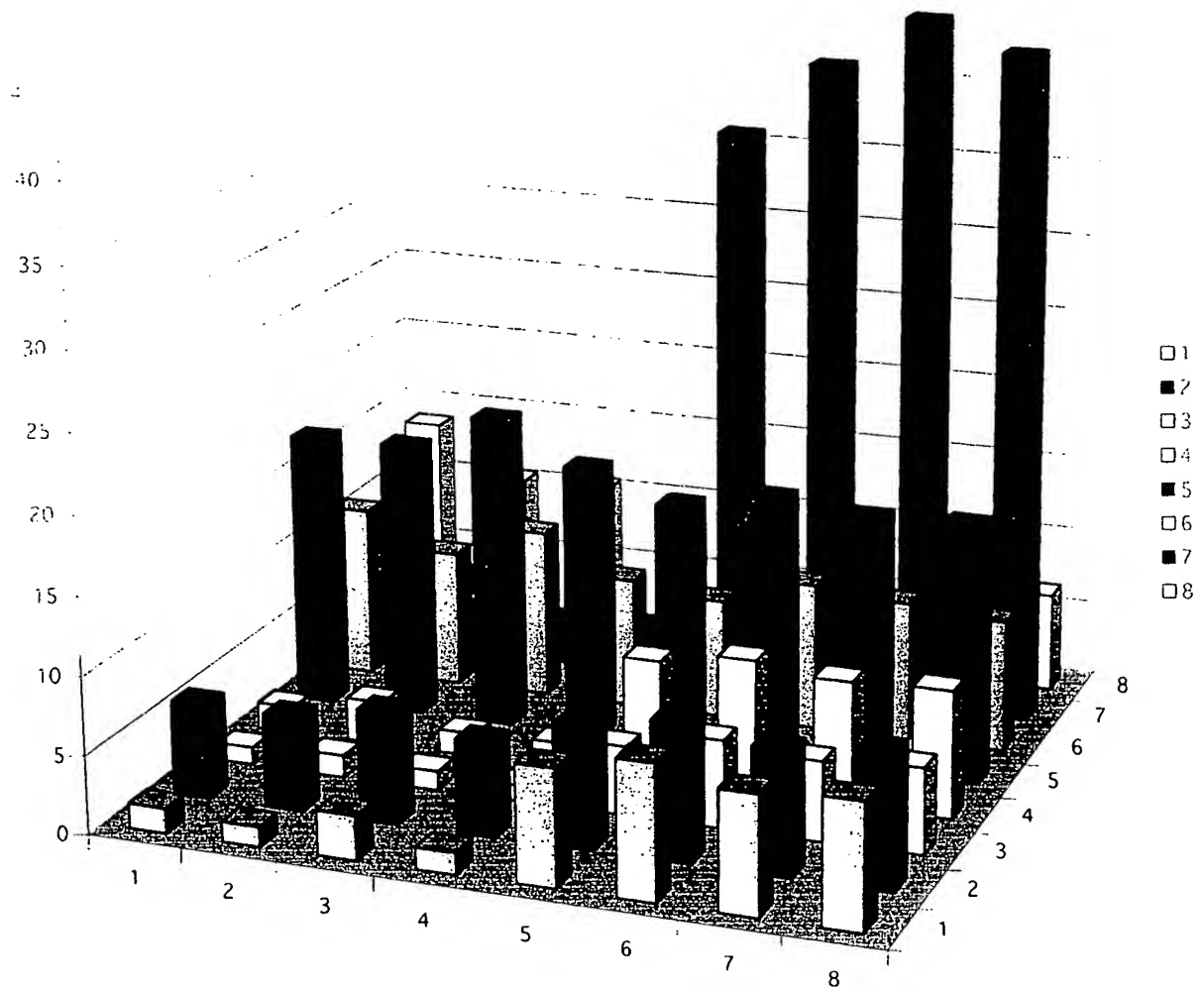
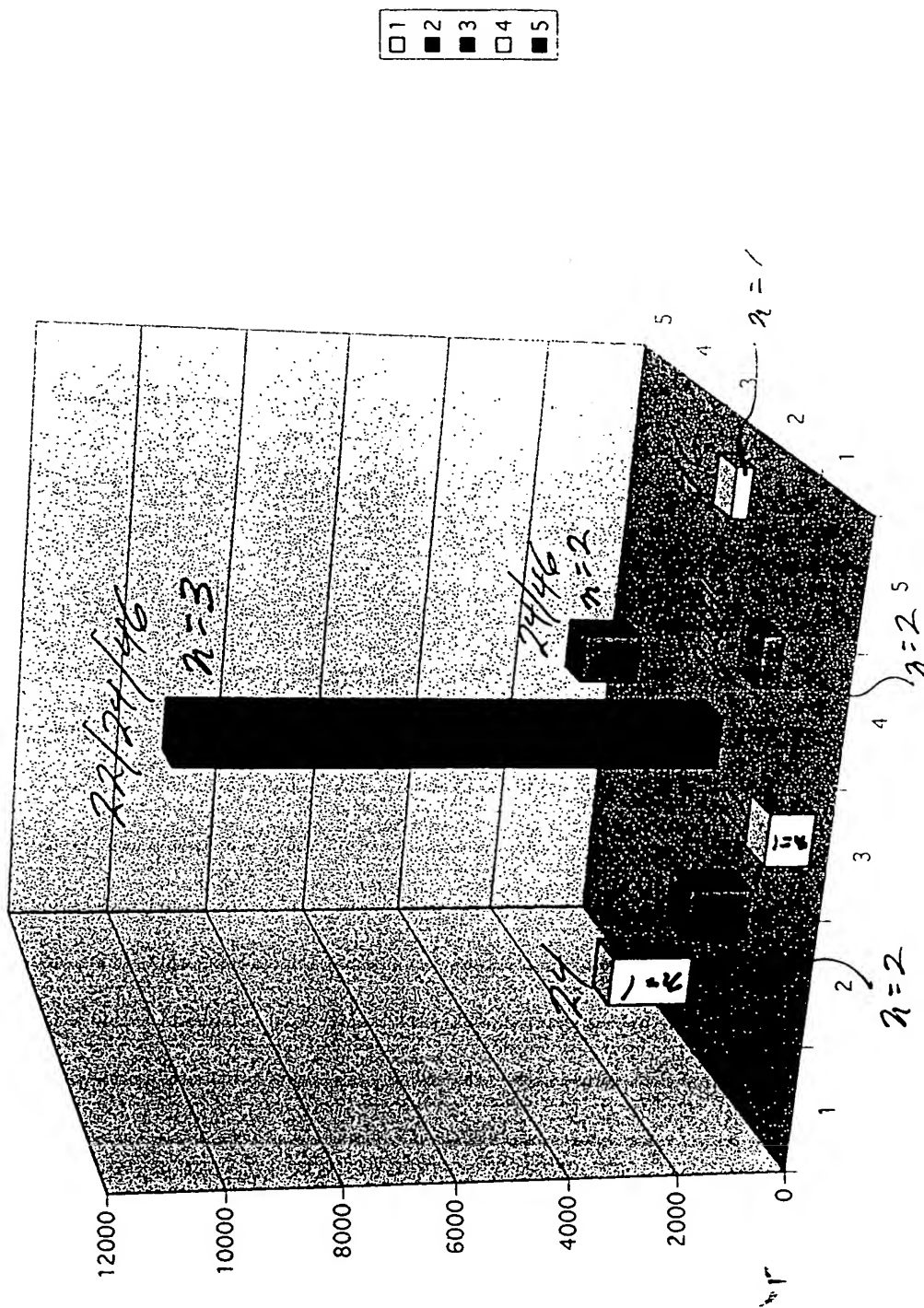


FIGURE 35 R-1470 DATED

25/11/22

COMPARISON OF $n=1$, $n=2$, $n=3$

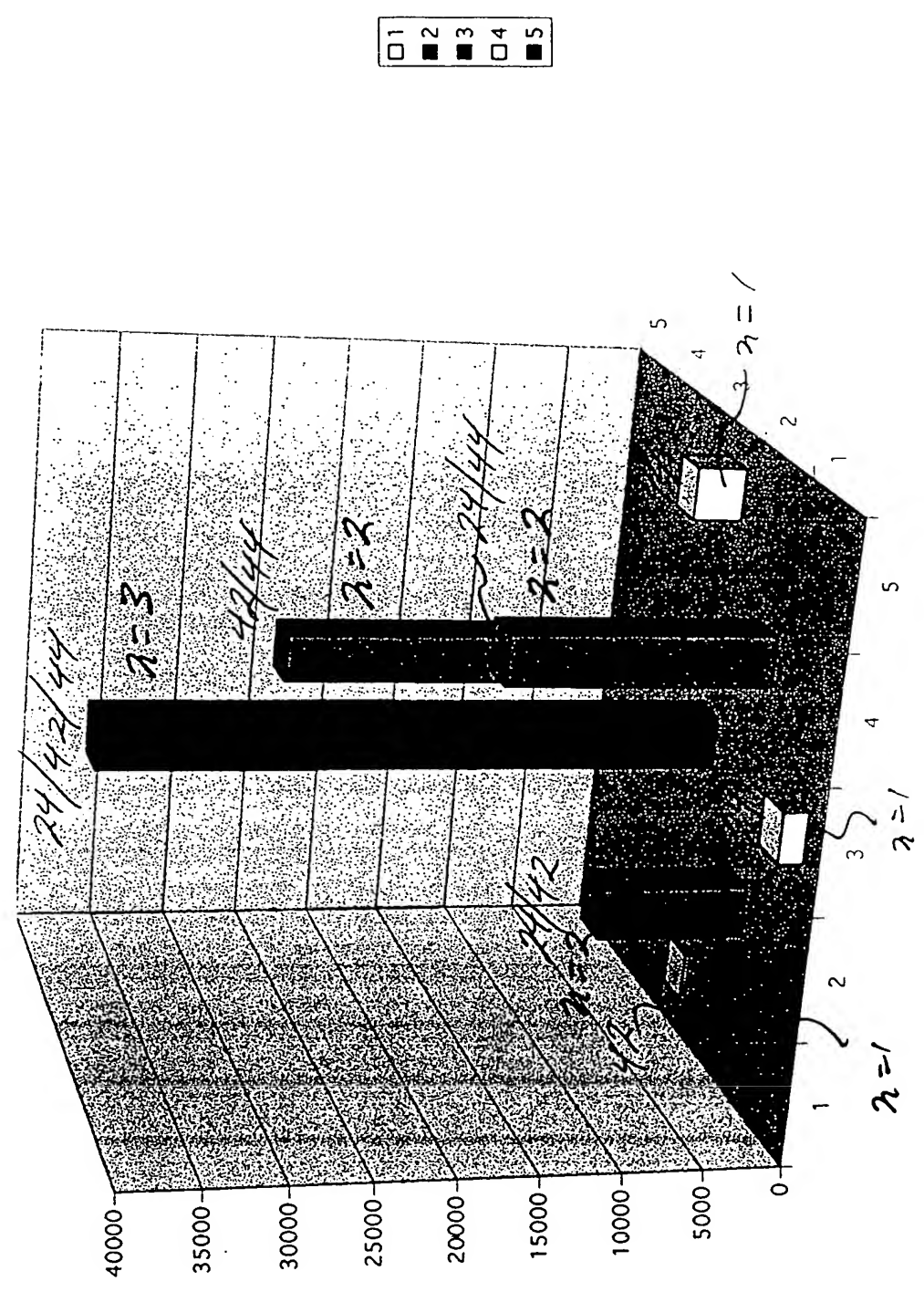


NOTE: "ZZ" REFERS TO [2-2], etc.

$\lambda = 3$
 $24/42/44$

FIGURE 36 R-PHYCO DATA

COMPARISON OF $n=1$, $n=2$, $n=3$

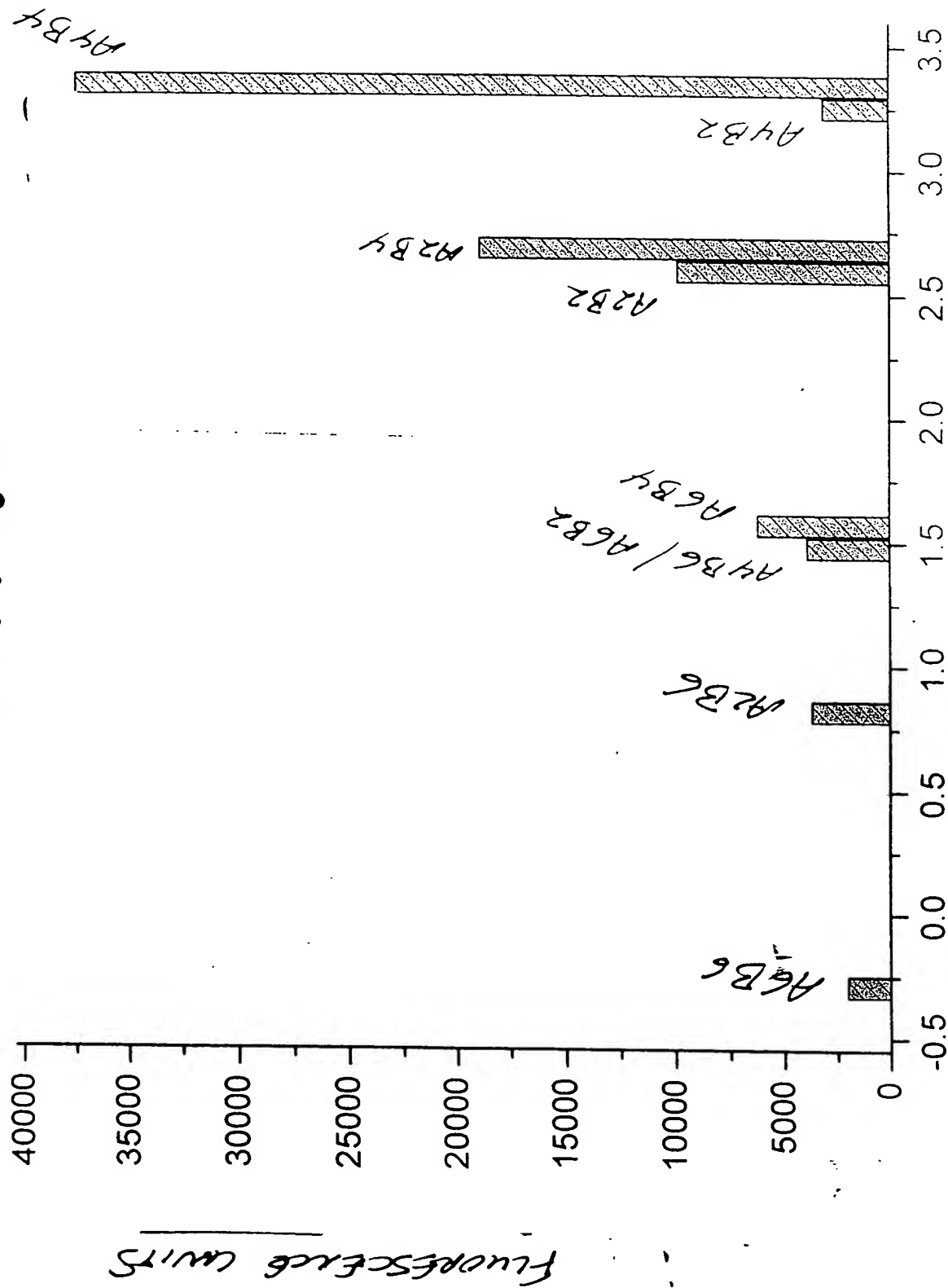


NOTE: "24" REFERS TO [2-4], etc.

FIGURE 37 LOG P VERSUS BINDING FOR $n=1$ SYSTEMS.



$n=1: n=1$



LOG P

FIGURE 38 LOG P VEASAS BINDING

FOR $n=2$ SYSTEMS.

R-PHYCO

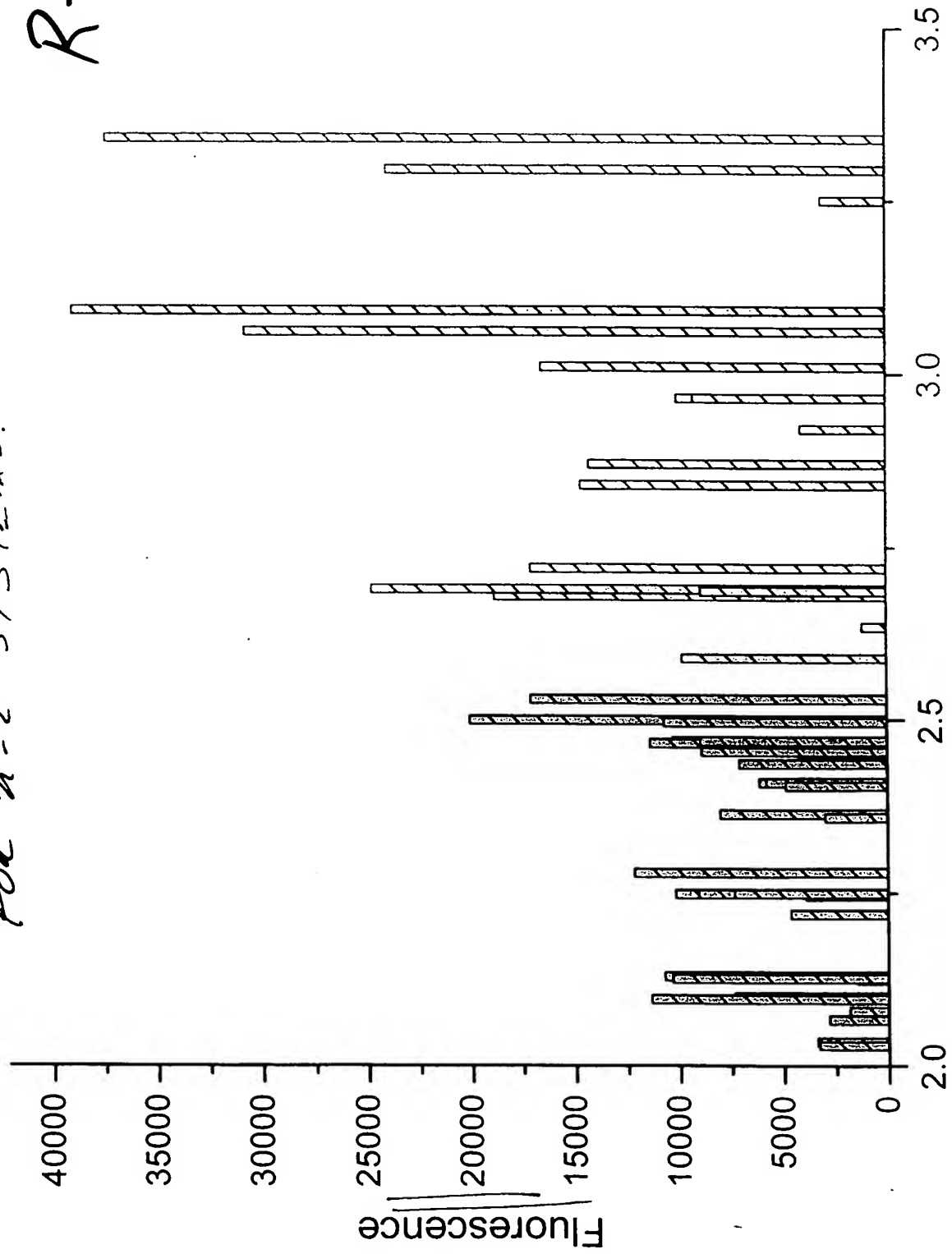
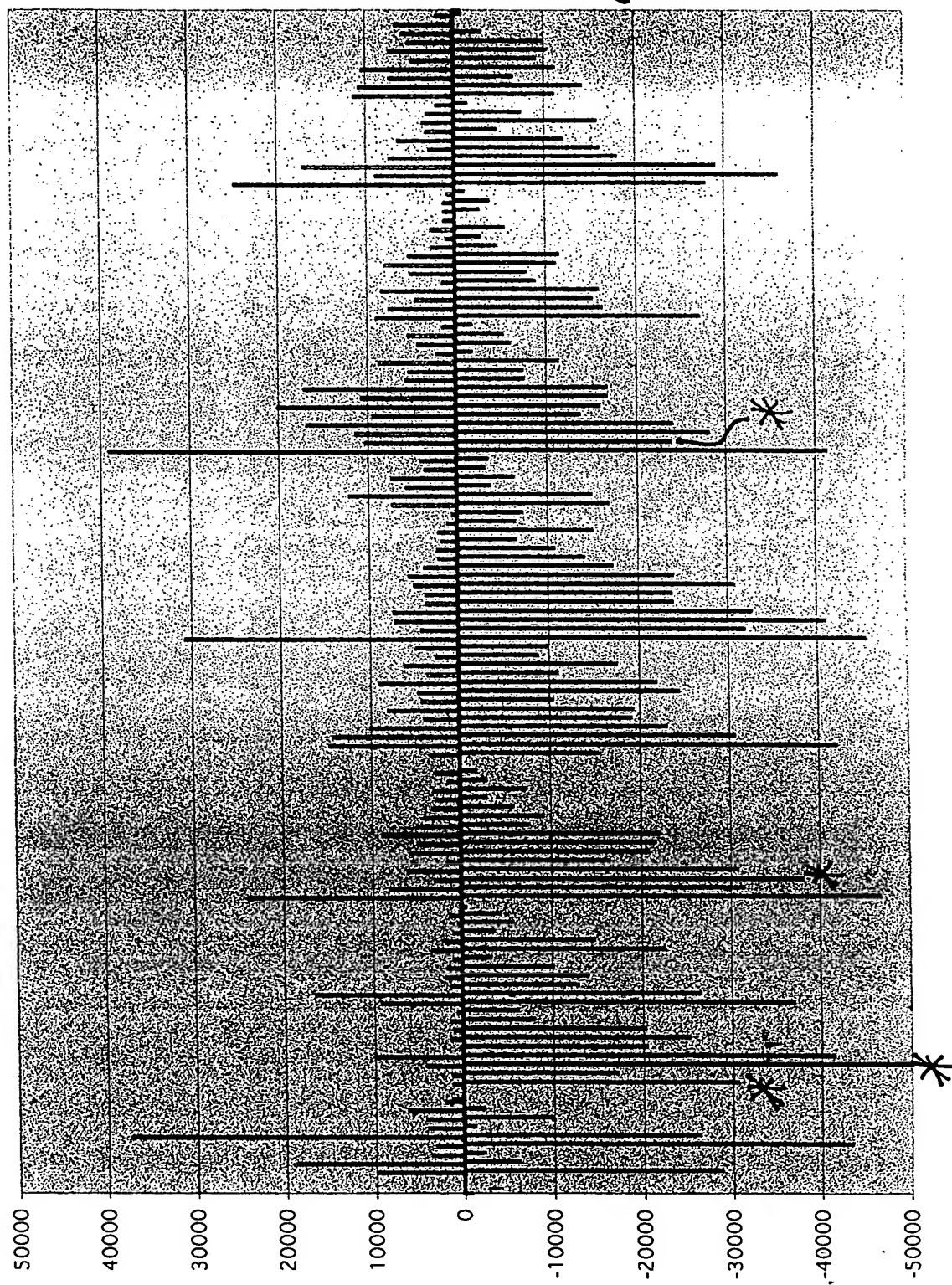


FIGURE 39 COMPARISON OF R-PHYCOCYANIN
AND BSA BINDING.

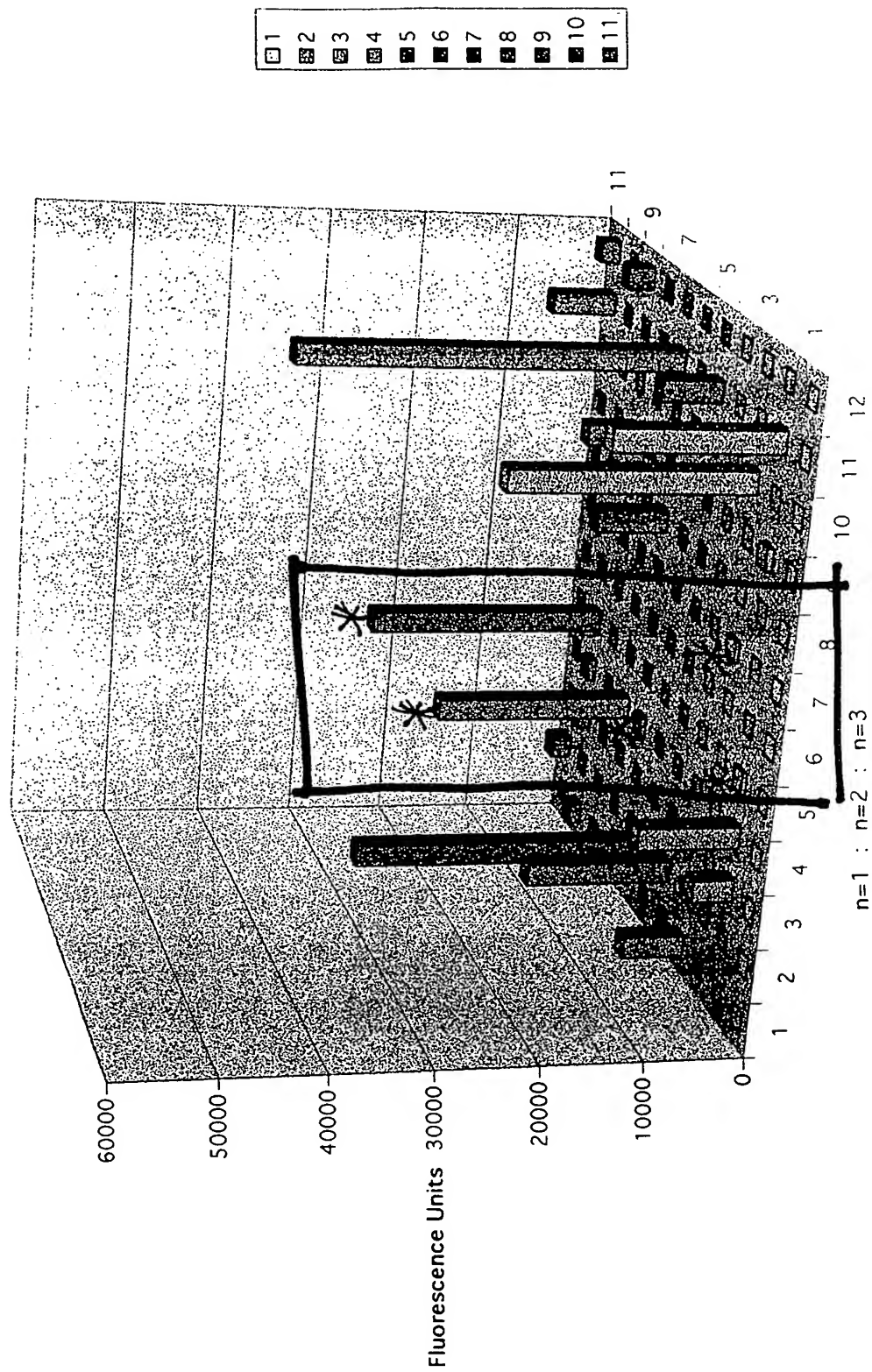


R-PHYCC

RHO2-BSA

FIGURE 40 SELECTED BINDING: PHYCOERYTHRIN

N=9 n=1, n=2, n=3 COMBINATIONS r-PHYCO



BSA

FIGURE 41 SELECTED BINDING

N=9 n=1, n=2, n=3 COMBINATIONS BSA/bioterrorism

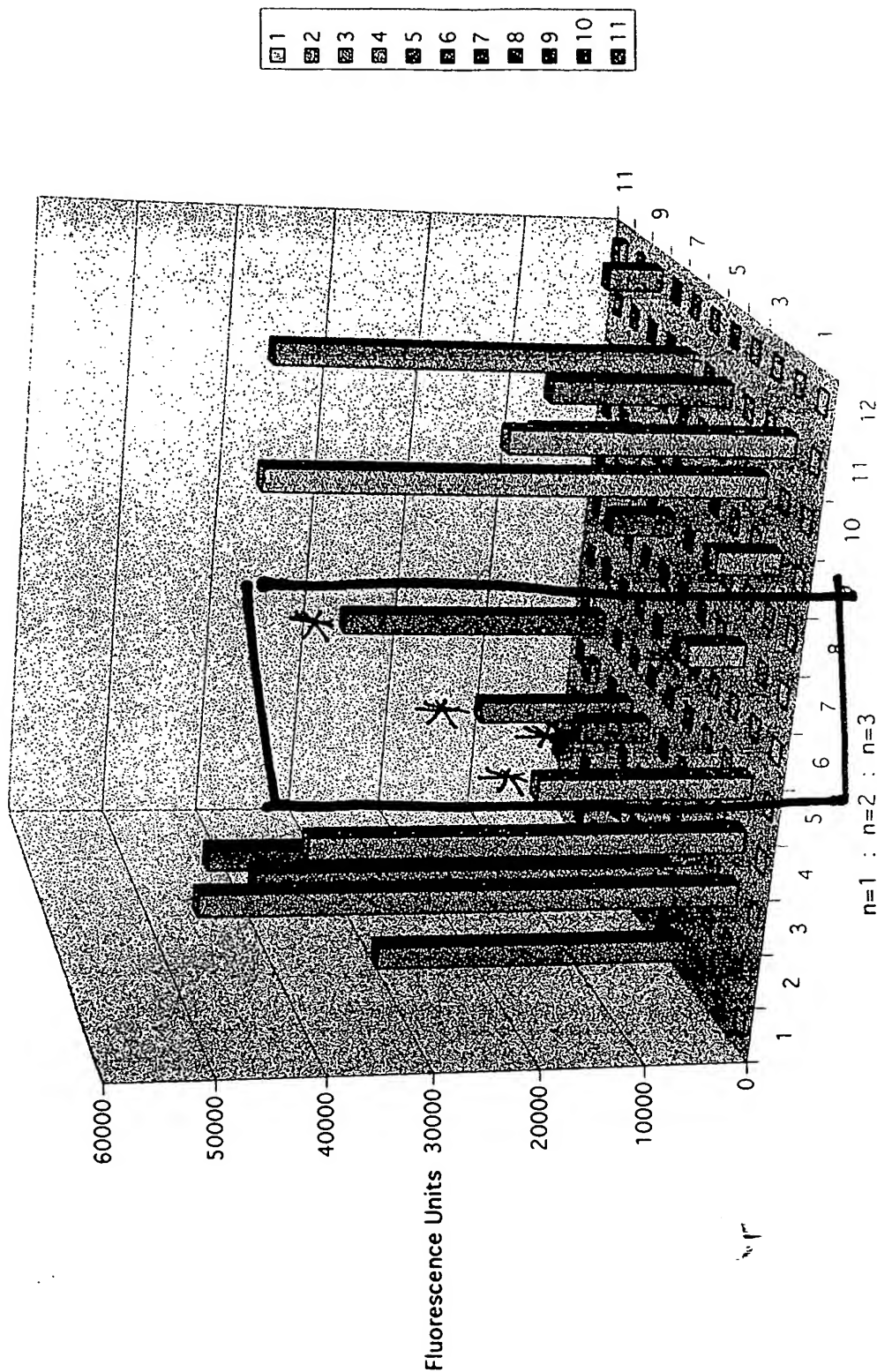
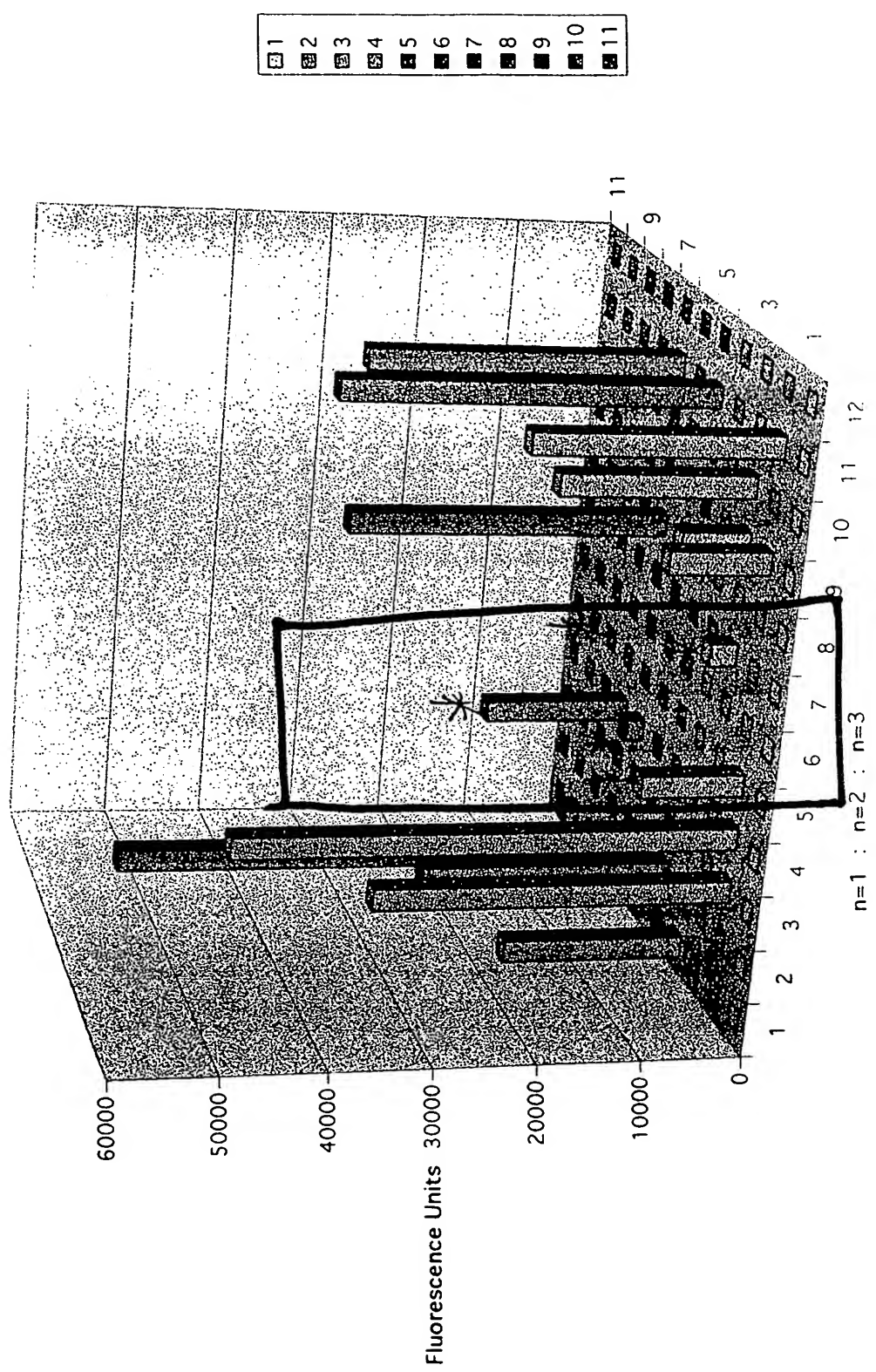


FIGURE 42 SELECTED BINDING: OVA BURN

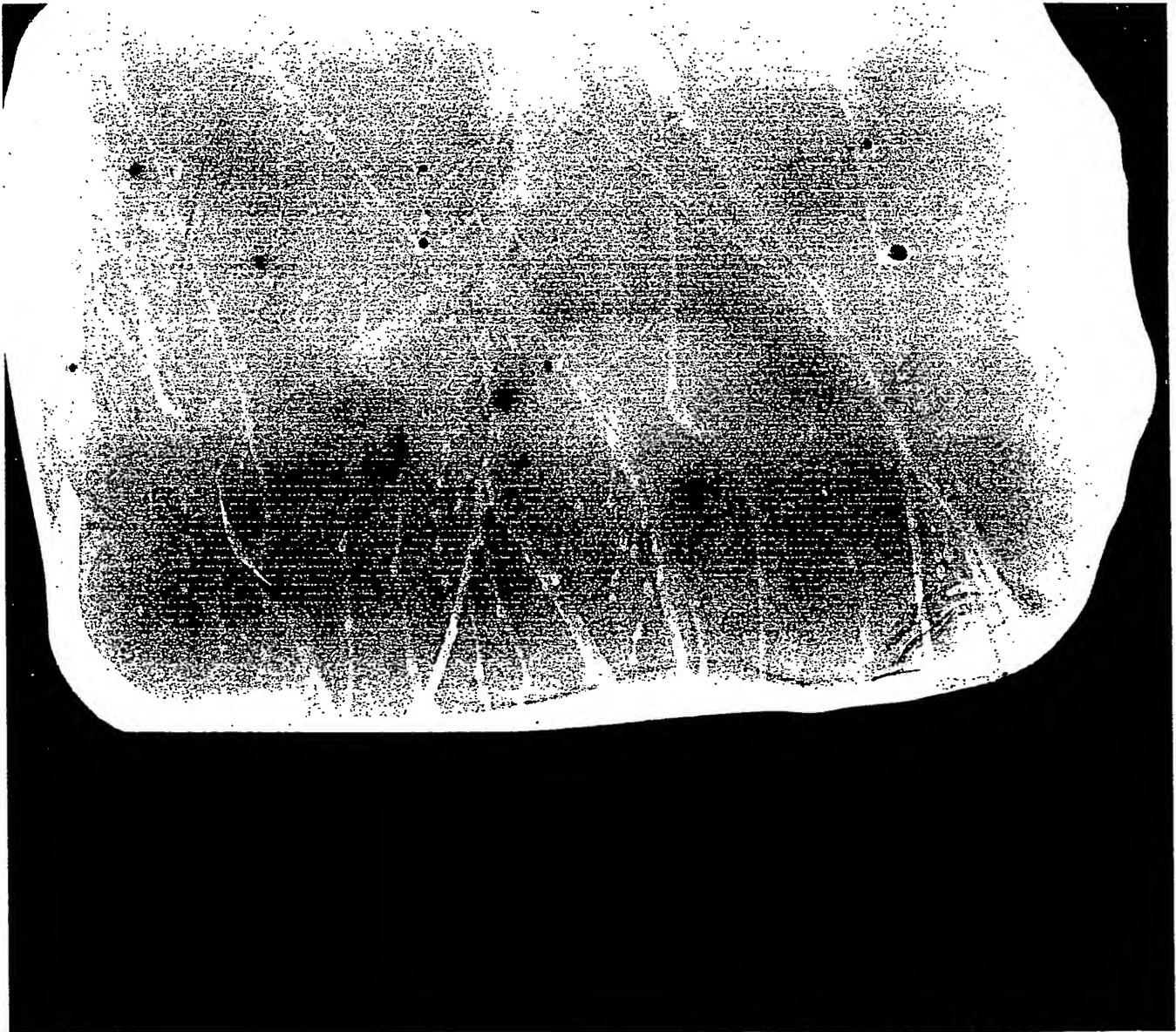
N=9 n=1, n=2, n=3 COMBINATIONS OVAL1/bioterrorism



GenePix Image - Wavelength 635

File name = 2004-03-29_0860.tif
Date = 2004/03/29 14:30:04
Origin = 4, 0 pixels
(0.04, 0 mm)
Size = 2180 x 1368 pixels
(21.8 x 13.68 mm)
Scaling = 10 μ m/pixel
Scanner = GenePix 4100A 01 (9249-1)
Nr. averaging.
PMT Gain=6
Laser Power=100
Normalization Factor=1
Filter=670DF40
Focus Position=0

Fig 43,000



GenePix Image - Wavelength 635

FIGURE

44

File name = 2004-03-29_0854.tif
Date = 2004/03/29 12:31:45
Origin = 4, 0 pixels
(0.04, 0 mm)
Size = 2180 x 1068 pixels
(21.8 x 10.68 mm)
Scaling = 10 um/pixel
Scanner = GenePix 4100A 01 [9]--
No averaging.
EMT Gain=...
Laser: I 4000
Normalization: Fast 101
Filter=6700F40
Focus Position=0

bg = 42,000

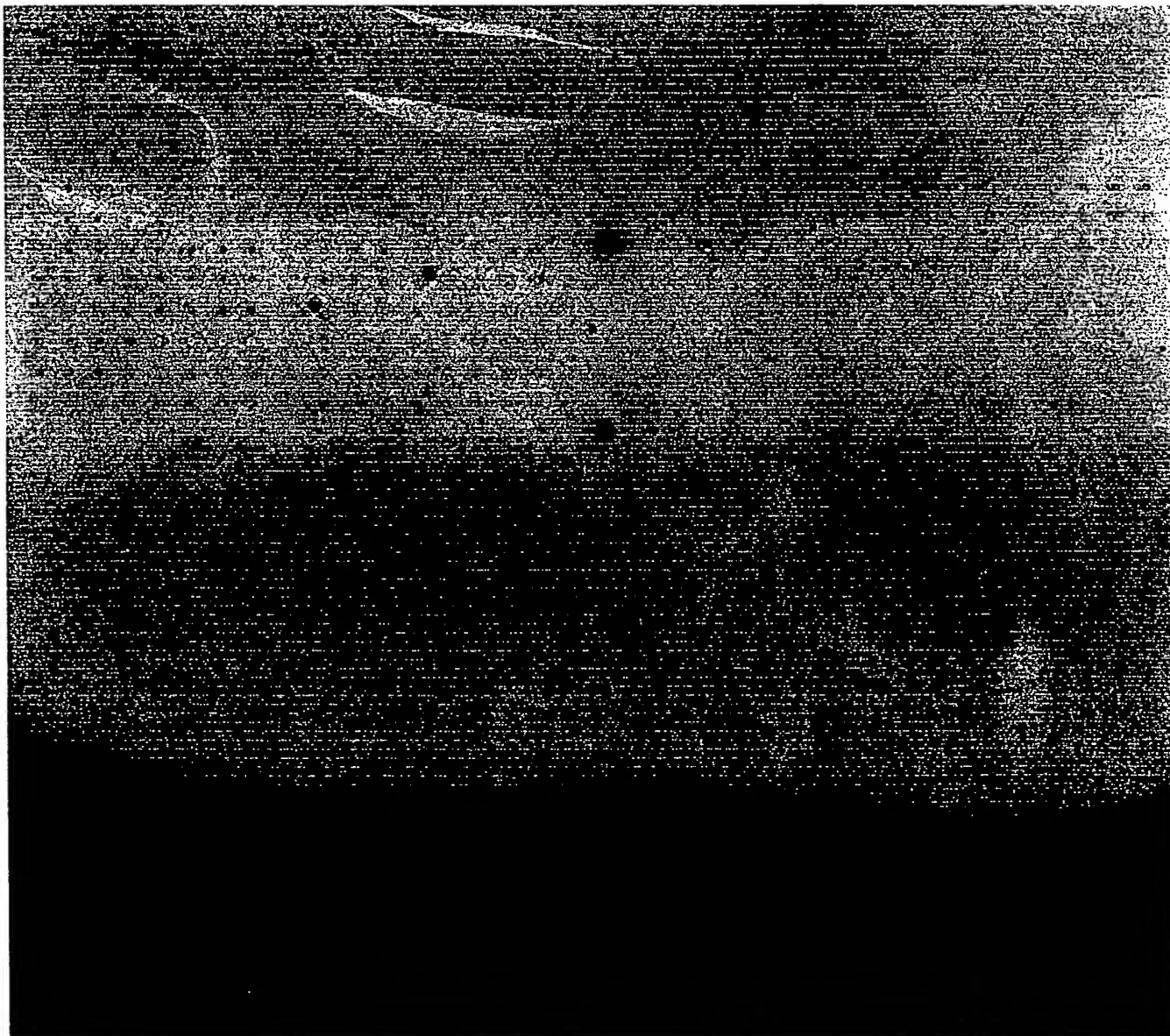


GenePix Image - Wavelength 635

FIGURE

45

File name = 2004-03-29_0861.tif
Date = 2004/03/29 15:40:20
Origin = 4, 0 pixels
(0.04, 0 mm)
Size = 2180 x 1368 pixels
(21.8 x 13.68 mm)
Scaling = 10 µm/pixel
Scanner = GenePix 4100A 1 [GenPix]
N averaging
INT Gain=70
Laser Power=100
Normalization Factor=1
Filter=670DF40
Focus Position=0



2004/03/29 16:27:10

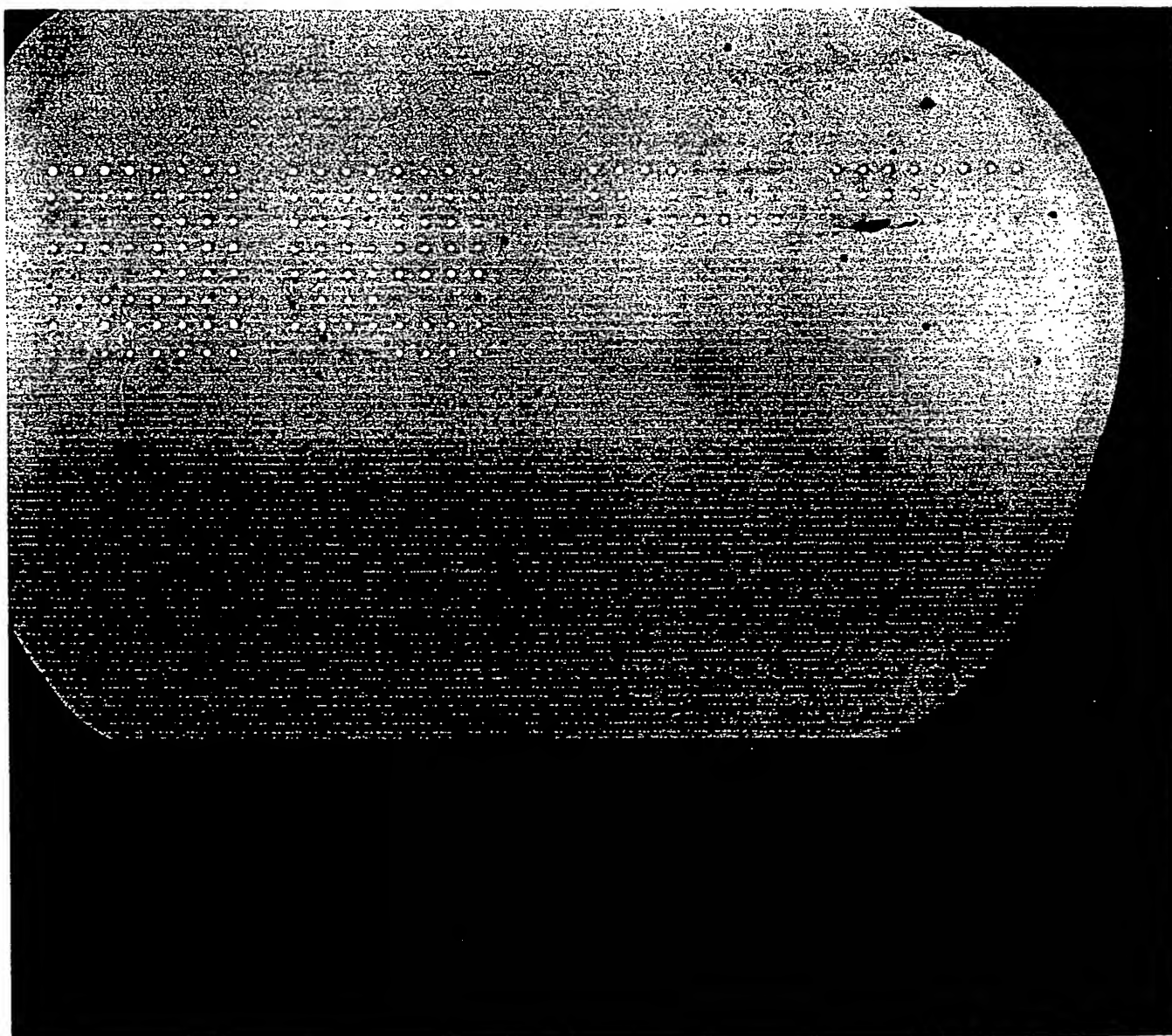
GenePix Image - Wavelength 635

FIGURE
46

File name = 2004-03-29_0863.tif
Date = 2004/03/29 15:48:56
Origin = 4, 0 pixels
(0.04, 0 mm)
Size = 2180 x 1368 pixels
(21.8 x 13.68 mm)
Scaling = 10 μ m/pixel
Scanner = GenePix 4100A v. [92696]
No averaging.
EMT Gain=560
Laser Power=100
Normalization Factor=1
Filter=670DF40
Focus Position=0

by: 38,000

high: 28,000

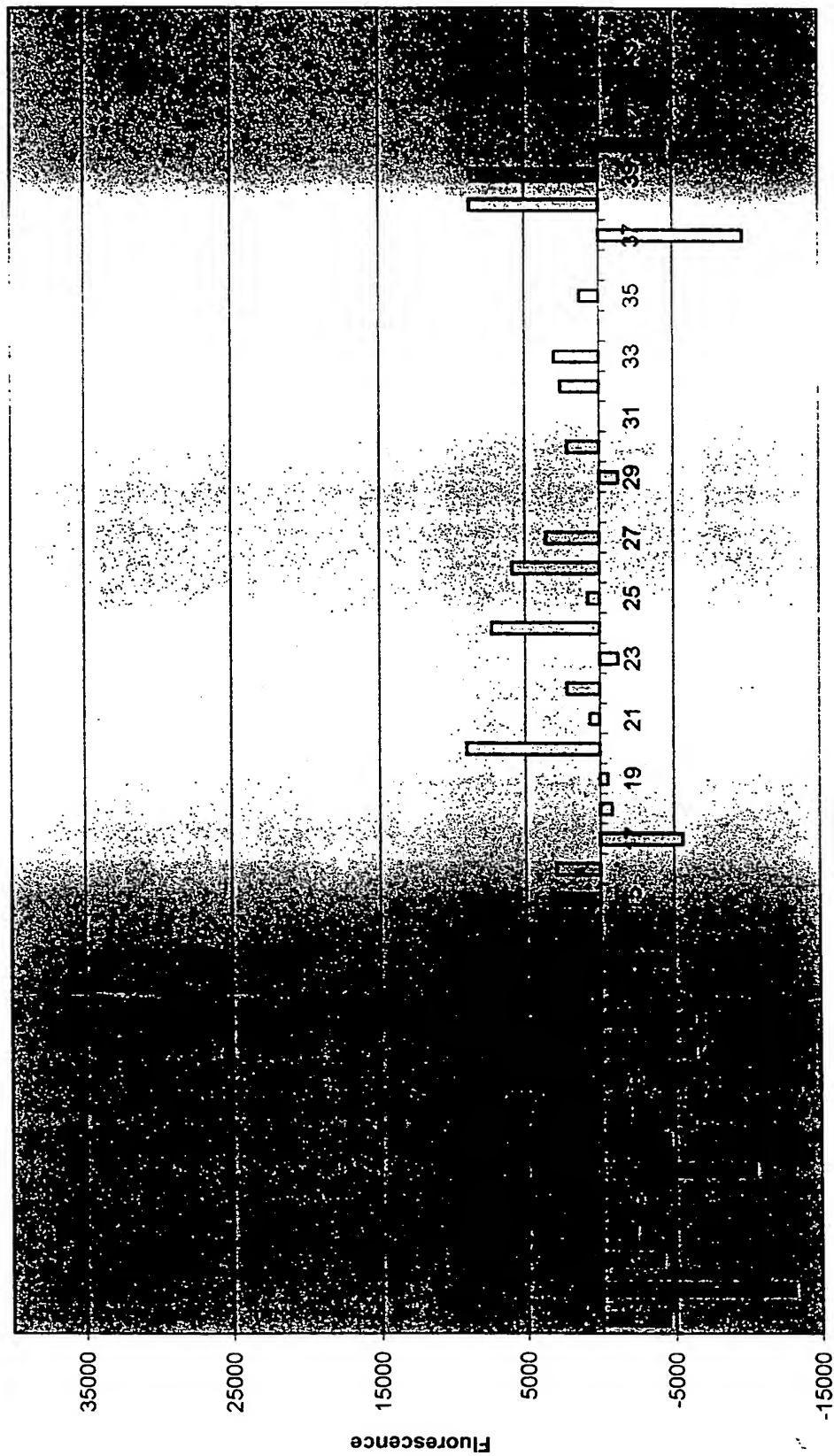


2004/03/29 16:55:30

99-53-6 | 03/29

FIGURE 47

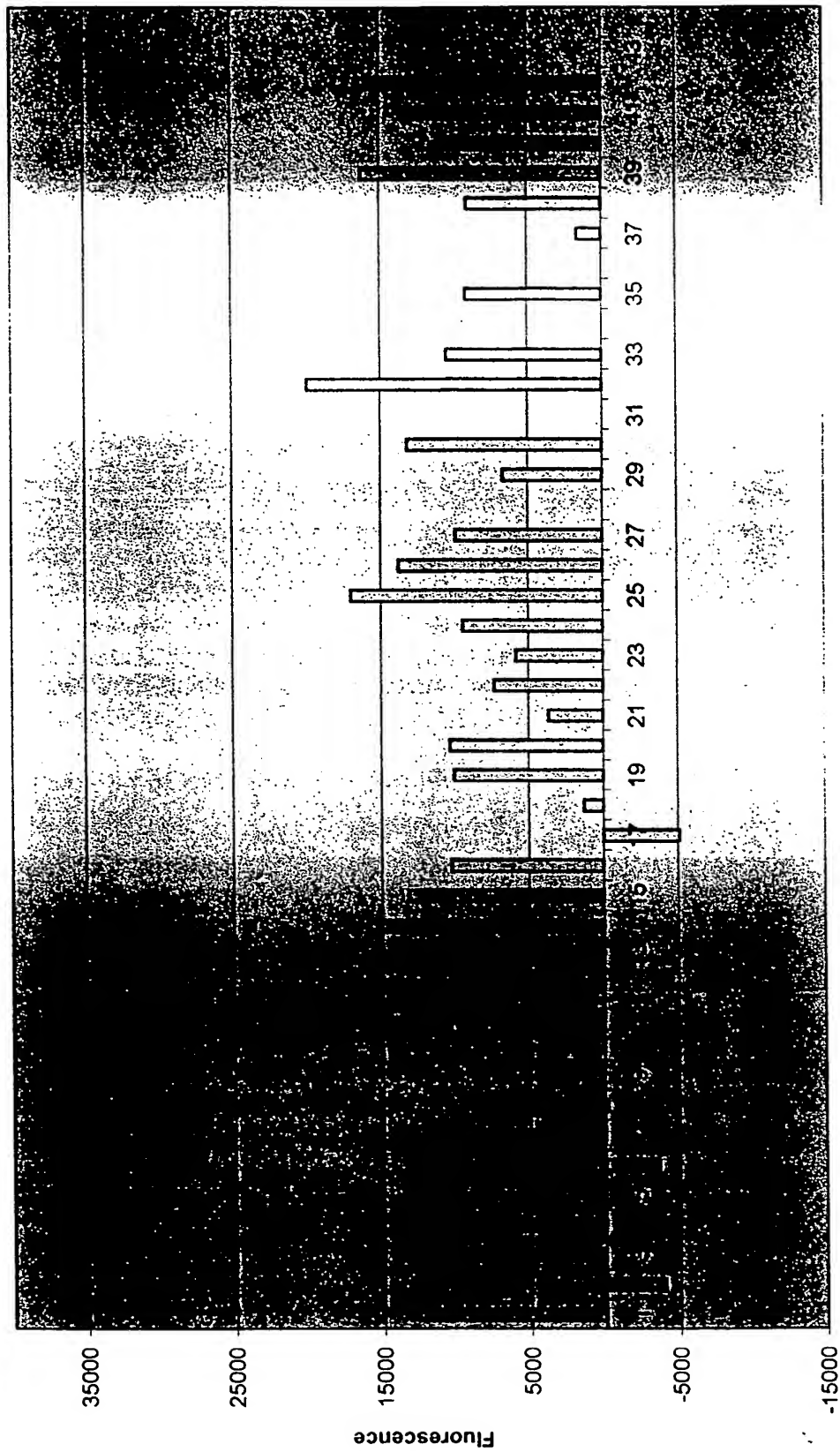
CARA DYNAMIC C18 / B.C. 1.0 CHO3 3C (N9n2, img 03-29-0861, PMT 600)



99-52-4 03/29

FIGURE 48

CARA DYNAMIC C18/B.C. 1.0 CHO3 23C (N9n2, img 03-29-0854, PMT 600)

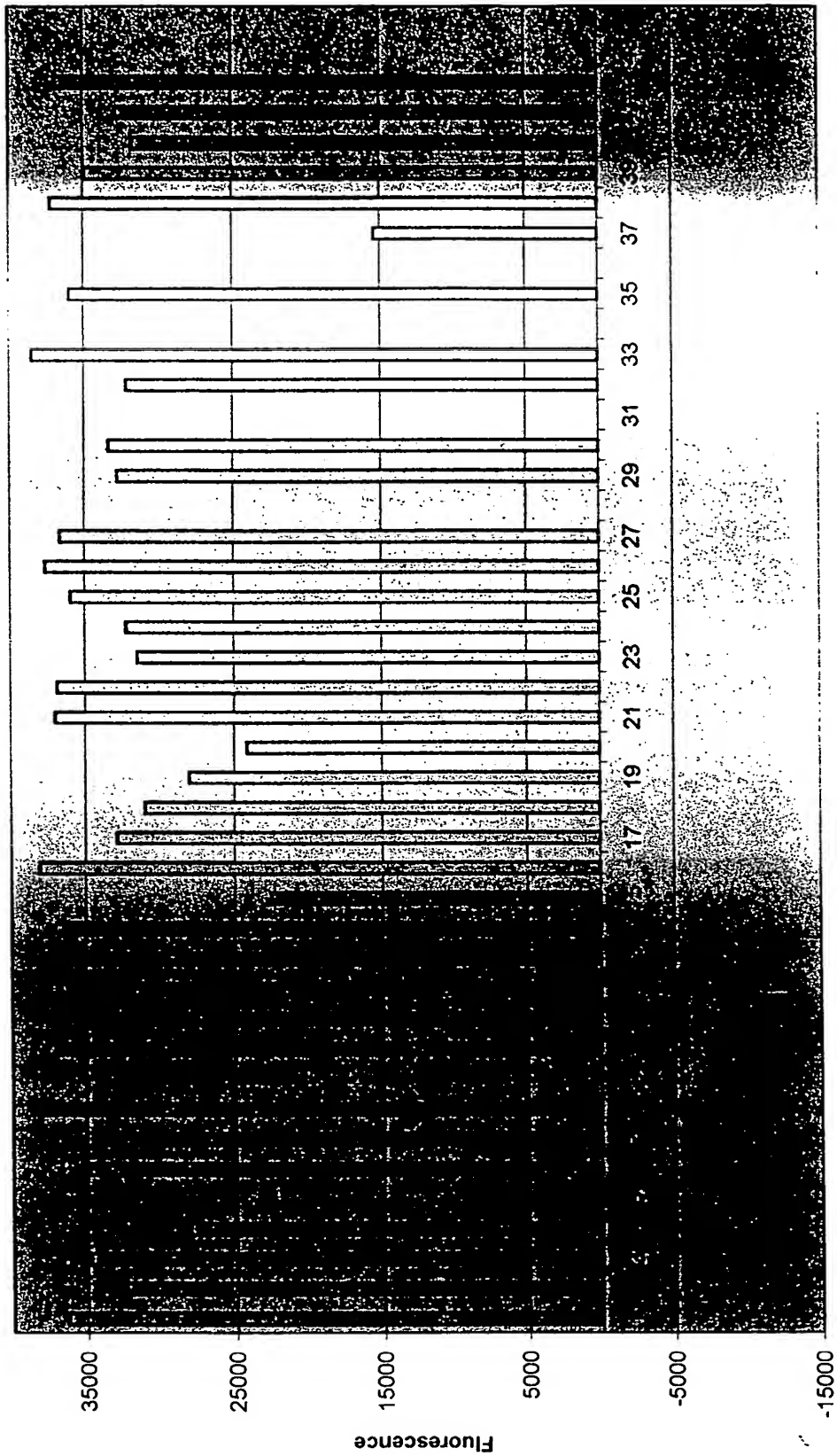


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99-53-7 03/29

Figure 49

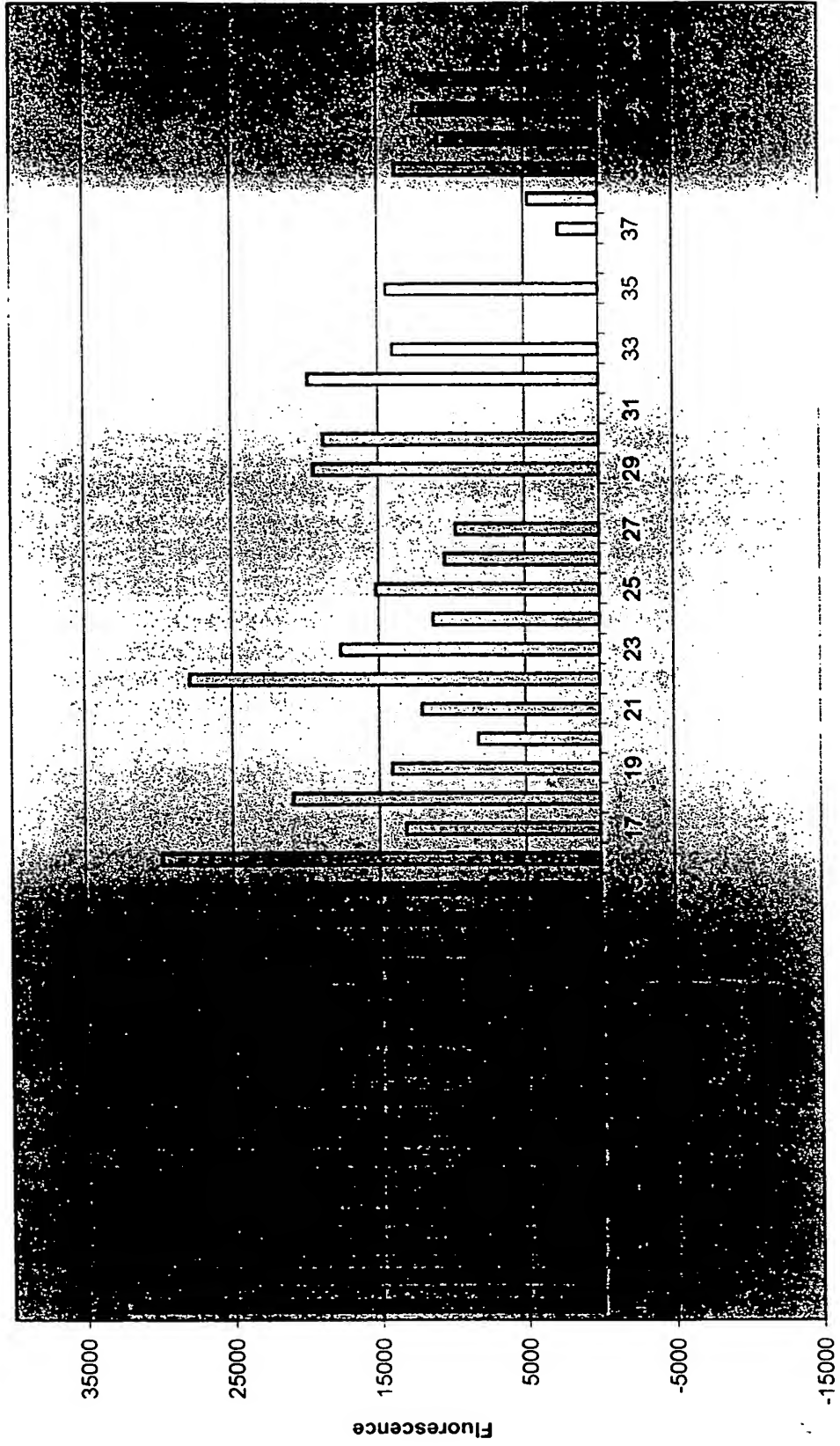
CARA DYNAMIC C18 / B.C. 1.0 CHO3 43C (N9n2, img 03-29-0863, PMT 560)



99-52-5 | 03/29

Figure 50
STATT

CARA STATIC 1.0 CHO2 23C (N9n2, img 10-09-0048, PMT 590)



99-54.1 | 03/29

FIGURE 51

CARA DYNAMIC Incubation Temperature with 1.0 CHO3

